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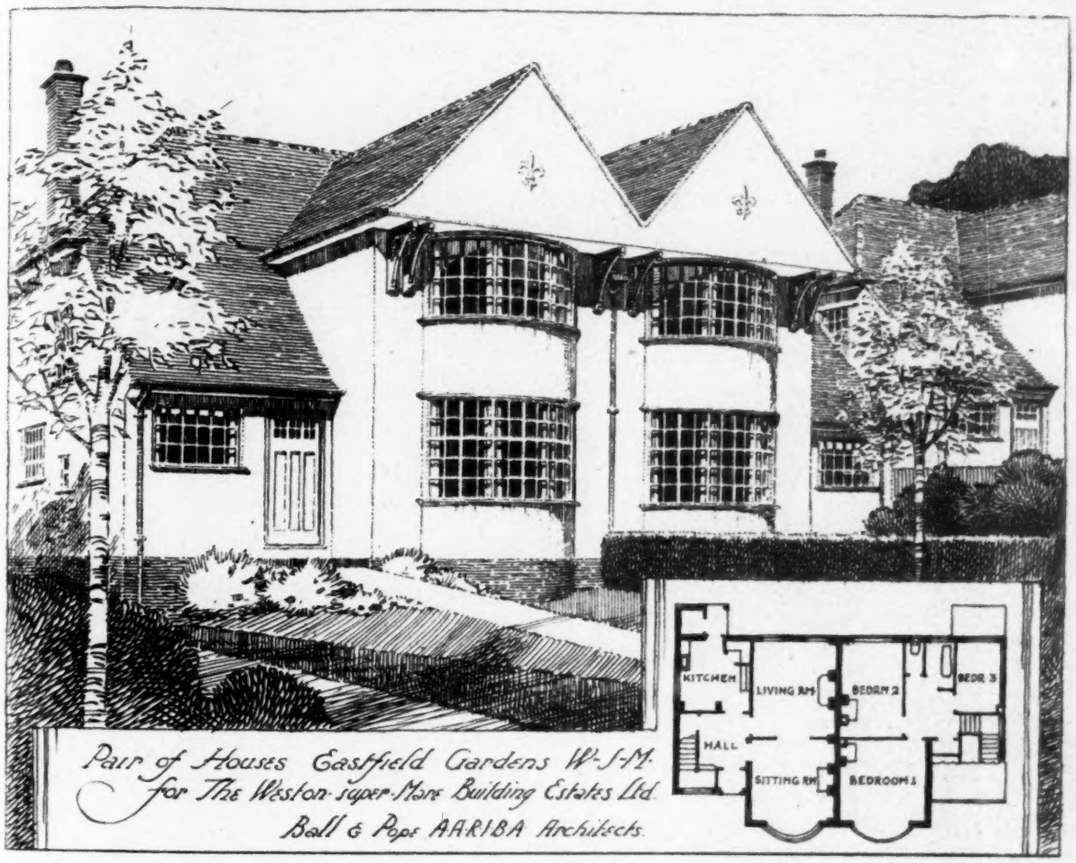


Pair of Houses Eastfield Gardens W. J. M. for The Weston-super-Mare Building Estates Ltd. Ball & Pope AARIBA Architects.

(See page 614).

MEETINGS

FRIDAY, *October* 20.

London Society. Mr. J. H. O. Bunge on "Thames Passenger Service: a Relief to Traffic Congestion." 5 p.m.

Institution of Sanitary Engineers. Mr. B. H. Knight on "Aggregates for Concrete Work." At Caxton Hall, S.W.1. 6 p.m.

Institution of Structural Engineers (Western Counties Branch). Mr. G. B. R. Pimm on "Foundations." At the Merchant Venturers' Technical College, Unity-street, Bristol. 7.15 p.m.

SATURDAY, *October* 21.

Institution of Municipal and County Engineers. North Wales District Meeting. At Colwyn Bay.

Royal Sanitary Institute. Mr. W. Lionel Jenkins on "The River Lee Improvement Works." At the Town Hall, Stratford, E.15.

MONDAY, *October* 23.

Chadwick Public Lectures. Mr. P. W. Coombe on "Port of London Sanitary Administration." At 18, John-street, W.C.2. 5.15 p.m.

TUESDAY, *October* 24.

Institution of Engineers and Shipbuilders in Scotland. Mr. E. J. Clarke on "Flame Cutting of Steel for Welded Joints." At Glasgow. 7.30 p.m.

WEDNESDAY, *October* 25.

L.C.C. Central School of Arts and Crafts. Sir Banister Fletcher on "Italian Mediæval Architecture: I." 6 p.m.

THURSDAY, *October* 26.

Institution of Electrical Engineers. Inaugural Address by Mr. P. V. Hunter. 6 p.m.

Institution of Structural Engineers. Mr. A. Frost on "Cumberland Hotel and Annexe." At 10, Upper Belgrave-street, S.W.1. 6.30 p.m.

Society of Antiquaries. Ordinary Meeting. At Burlington House, W.1. 8.30 p.m.

Architecture Club. Discussion on "'Unit' Architecture and 'Unit' Furniture." 8.30 p.m.

FRIDAY AND SATURDAY, *October* 27 *and* 28.

Royal Sanitary Institute. Meeting at Cheltenham.

FRIDAY, *October* 27.

Civil Engineering Society of the Glasgow Royal Technical College. Mr. W. Shaw on "Quarrying for Building and Road Stone." 7.45 p.m.

SATURDAY, *October* 28.

Architectural Association. Mr. E. A. A. Rowse on "The Solution for the City." 3 p.m.

MONDAY, *October* 30.

Institution of Mechanical Engineers. Mr. F. H. Murdoch on "Stainless Steels." 6.45 p.m.

TUESDAY, *October* 31.

Architectural Association. Address by the President, Mr. C. Lovett Gill. 7.45 p.m.

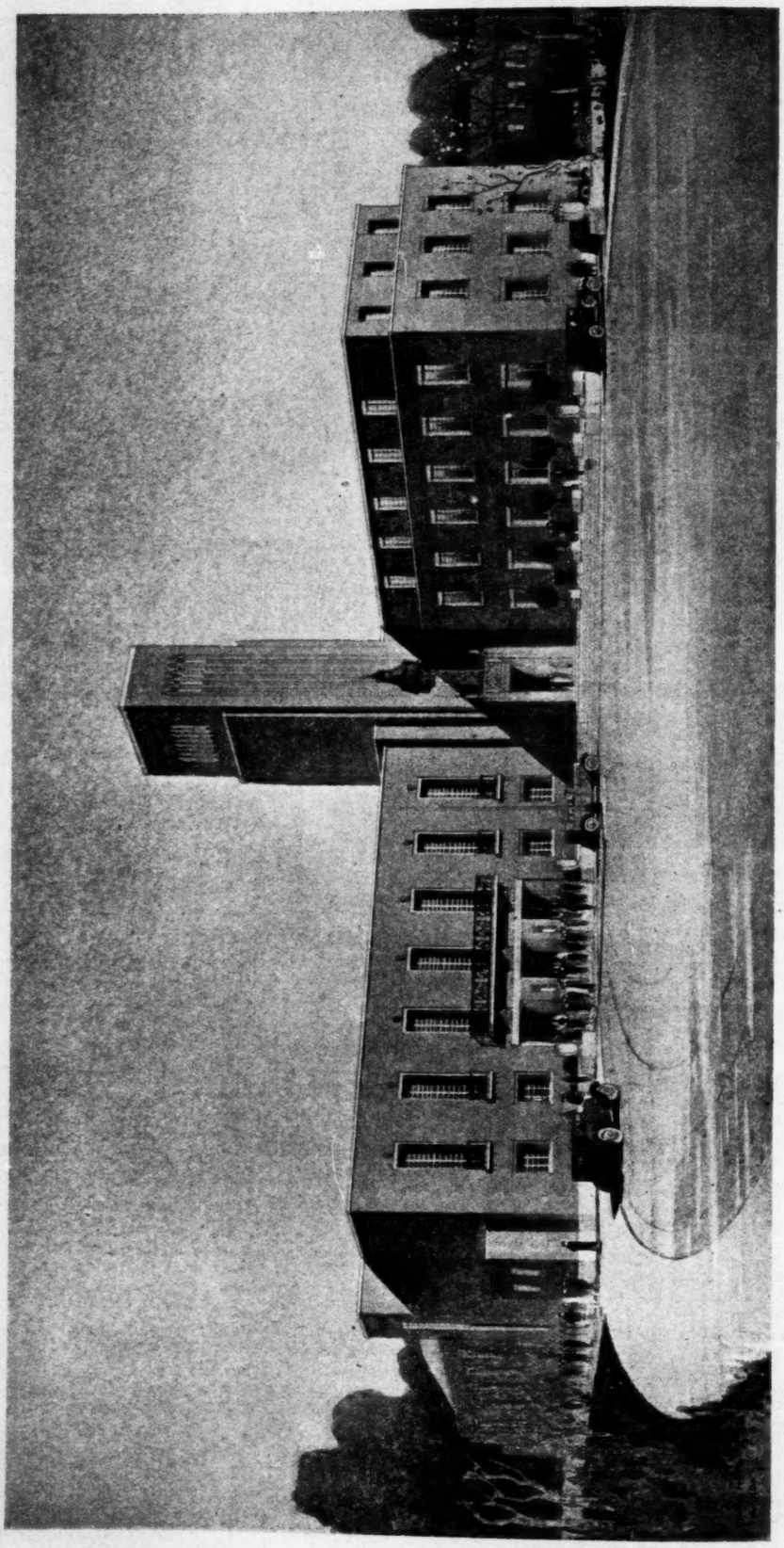
TUESDAY-WEDNESDAY, *October* 31-*November* 22.

Architectural Association. Annual Exhibition of Water-colours, Etchings, and other Drawings by Members.

WEDNESDAY, *November* 1.

Liverpool Architectural Society. Mr. R. A. Duncan on "Revolution in the World of Appearance." 6 p.m.

L.C.C. Central School of Arts and Crafts. Sir Banister Fletcher on "Italian Mediæval Architecture: II." 6 p.m.



HORNSEY MUNICIPAL BUILDINGS COMPETITION : Perspective View of Winning Design.
BY MR. R. H. UREN, A.R.I.B.A.

THE ARCHITECT'S HOLIDAY

AT no other time is one more inclined to look back than in these days which fall between the light-hearted spirit of the holiday months and the stern resolves for a less generous season. We have yet to forget the time of relaxation, and yet to brace ourselves anew to the task of living, and it is perhaps those who have entered most whole-heartedly into the holiday spirit, throwing off all thoughts of work and the everyday life, who regard the prospect of harness with the greatest sense of distaste.

On the other hand, there are those who have a genius for carrying the life's work in its pleasantest aspect away with them upon holiday, and to such as these a return to the desk or study presents fewer distractions and more attractions. Their reaction to the normal is less acute. Among such as these the architect who loves his work finds himself in a privileged position. The doctor may wish to forget sickness and accidents; the lawyer litigation and legal routine; the schoolmaster discipline and the boy. But the architect cannot, and would not wish to, forget the art of building, which the activities of man in this and distant times thrusts upon his notice.

To such as he the guide book is no tyrant to instruct as to the things the right sort of people should not miss, but is a useful catalogue of the things he would desire to see without the prompting. The country tour is full of surprise and interest, and he sees more to delight him, if he sometimes pays dearly by seeing the appalling things which leave others indifferent. The hustle of modern life, which impels men to get done with one task and on to the next as quickly as possible, pervades even the holiday, where no task need exist. The gentle wanderings of older days give place to attempts to see with the eye more than the mind can digest, and the mass-produced impression threatens the conclusions of the philosopher. The older man is not immune from the pervading influence, and even less so is the young student. The light distractions which modern life strew in his path whenever he can spare time for thought and study, set their mark upon him when he goes forth on a fortnight's holiday. It is hard indeed for him to tune himself to the mild adventures of a country ramble, or anchor himself to the village lodging, when the big towns burst themselves with easy attractions, and throw out their fleets of coaches into the innermost sanctums of the countryside, sparing him an hour or two out of an afternoon in which to find a week's-worth of interest, which was once thought worth long adventures on foot or cycle. The motor cycle offers him a chance to cover the surface of a county, and it is indeed no more than the surface that he covers. The delights that lay below the surface remain to him a closed book. Is it to be wondered at that under such conditions impressions are light and wayward, and the value set upon such excursions inversely proportionate to the effort involved?

In former days, it was "the thing" to return equipped with evidence of delightful study; and the young man who failed to make use of his time in that pleasant fashion found his fellow-students apt to look askance at him as someone with them but not of them. Instructors expected this evidence of studentship; examiners measured their conclusions by this means; educational authorities encouraged this serious form of relaxation. The measured drawing prizes created widespread competition among the best students of the day, and records of historical monuments owe much to this form of youthful enthusiasm and industry.

We do not think we are assuming too gloomy an attitude when we suggest that the present generation of students will leave little of this kind as their contribution to architectural study and research. Too many have surrendered to the conveniences of the camera; and too many others to a conceit in their own powers of technique, achieving the slick effect without seeking to find the inner meaning. The conscientious record of architectural fact is becoming a rare plant, to the impoverishment of architectural thought.

Nor do we believe we exaggerate the importance of this defect when we attribute to it many of the defects of modern architectural design. Architecture cannot be swept aside with a few broad generalities. It is a process of meticulous care and subtlety, to which the mental attitude must be attuned. The motor cycle is not the philosopher's chair, nor the artist's retreat. It is a vehicle for the superficial. To dwell upon, and learn to understand, the refinements with which the old builders achieved beauty is the training for those who would imbue modern architecture with similar qualities. Poverty of feeling often masquerades as simple virtue, and we may become content with this if we do not continue to look more deeply into the core of things.

These would indeed be gloomy thoughts if we were not prepared to attempt a reform before we have left things too late, and the half-trained become the teachers of the next generation. The influence must come from above.

We would urge the need for more evidence of the sketch book and the measured drawing in the curriculum of the modern school, and much more serious demands in this direction from the examiners in qualifying examinations. We would have measured drawing prizes raised to greater prominence, and made relatively more attractive to students. But most of all, we would have much more general propaganda among the architects of the day and their assistants and pupils. A constant reminder to these latter that their masters expect to see evidence of observation and study would do much to revive a healthy habit of friendly rivalry. This is the better way for age to record the change in the times, than the futile regrets expressed from the depths of the club armchair.

We commend this to our readers as a profitable line of thought as we adapt ourselves once more to winter quarters, and look not so very far forward to more days in the open air.

NOTES

Powers and Practice.

It is one thing to have powers under an Act of Parliament, but another to live up to them. A responsible critic has suggested that the local authorities at Bath have been remiss in not applying the powers conferred upon them by the Town and Regional Planning Acts, and that the city has consequently suffered from unnecessary disfigurement as well as from inappropriate new work. This allegation has been refuted by the Mayor of Bath, and his statement shows that the Council is alive to its responsibilities. The fact that town planning powers fall under local administration should not mean that a slack authority can remain inactive to the permanent loss of the district. Plans should not only be prepared, but effectively carried out. We find it difficult to credit that any locality could be so persistently short-sighted as to suffer deliberate injury. We are glad to be reassured that Bath is aware of its importance, and intends to show the country that it values its unique character and unity. It is a sign of improved public interest that the subject has aroused so much concern throughout the country.

Rural Preservation.

It was a good suggestion to include at the meeting of the Rural Preservation Council, held recently in Buxton, an exhibition of grey and brown bricks. There is no doubt, as was said, that a correct choice of building materials is a vital factor in maintaining the beauty of a countryside, though it is one so often disregarded. Instances only too often occur in which the local character and surroundings of small towns or villages are violated by having thrust into the middle of them a building wholly foreign in design and materials. The advantage of building with materials drawn from the locality was one of the many sources of beauty in old buildings, though a course more difficult to follow under modern conditions. It is, however, most necessary to realise that the proper kind of building material is not the only vital factor, and is not enough in itself to achieve the end desired. The preservation of rural England will need much more, for it is the intelligence to use materials well and the human values directing their use that will ultimately determine it. The new Town and Country Planning Act is a powerful instrument for good, but persuasion and growing appreciation of the social obligations and general good should do more than "calling in the constable."

What is Art?

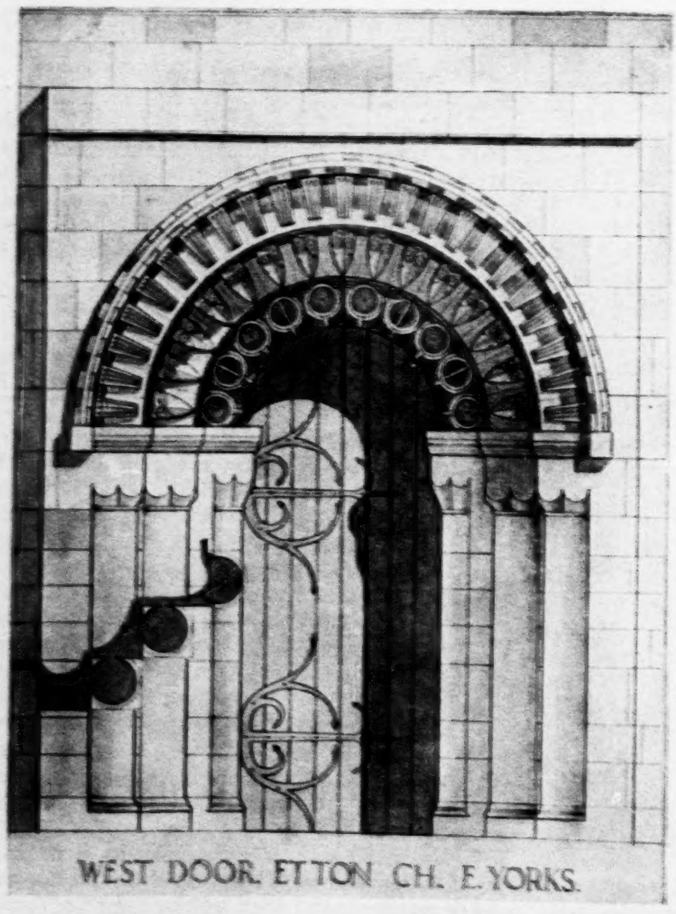
The number of easel pictures now produced annually is somewhat startling. In one exhibition alone, recently opened, there are 533 pictures. The pace at which they are produced accounts in part for it; it is not unknown, we believe, for an entire exhibition to consist in not much more than the previous six months' labours of the artist. This spate of pictures should, however, lead us to inquire as to the nature of art and how far this is met in what is exhibited. Otherwise the judgment of the public becomes more and more dissipated; the public do not understand that the facilities of craftsmanship, the result of the widespread extension of technical training, are little more concerned with art than was writing with literature when writing became more general.

Modern Designs in Steelwork.

Professor Maier Leibnitz, of the Technical High School in Stuttgart, gave a lecture on October 5 on modern factory design to a representative gathering of engineers at the headquarters of the British Steelwork Association, and the Professor was able to meet members of the Steel Structures Research Committee which was set up by the Department of Scientific and Industrial Research in co-operation with the British Steelwork Association, and he dealt with the direction of recent German research work in factory and steel-frame building construction. That research had brought to light many interesting advances, notably in the plastic theory of design, which has lead to a more rational utilisation of the elastic properties of steel construction. This was illustrated by tests carried out on continuous girders which show that the stress transfer due to plastic qualities of steel have not hitherto been definitely evaluated. We gave a report of the lecture last week on page 575.

Modern Indian Paintings in London.

The Exhibition of Modern Indian Paintings at the Fine Art Society's Galleries has special interest as the revelation of a new art, which is essentially of the India of today. A School of Indian Painting has developed in the last thirty years, and from Bengal has spread to other art centres in India. Marked features in the works shown here are the rich colour—blues and purples predominant—and the mystic feeling in such subjects as *Krishna and Jasoda* (by Saruda Akil), *The Wave Kissing the Moon* (the same artist), and the *Garden of Eden* (S. Choudbury); figures being freely introduced, generally in soft draperies. It may be noted that the two artists just



FROM A MEASURED DRAWING BY MR. E. JULIAN WHITE, A.R.I.B.A. (See page 607.)

mentioned are engaged on the mural paintings in India House in London.

Craft Alternatives.

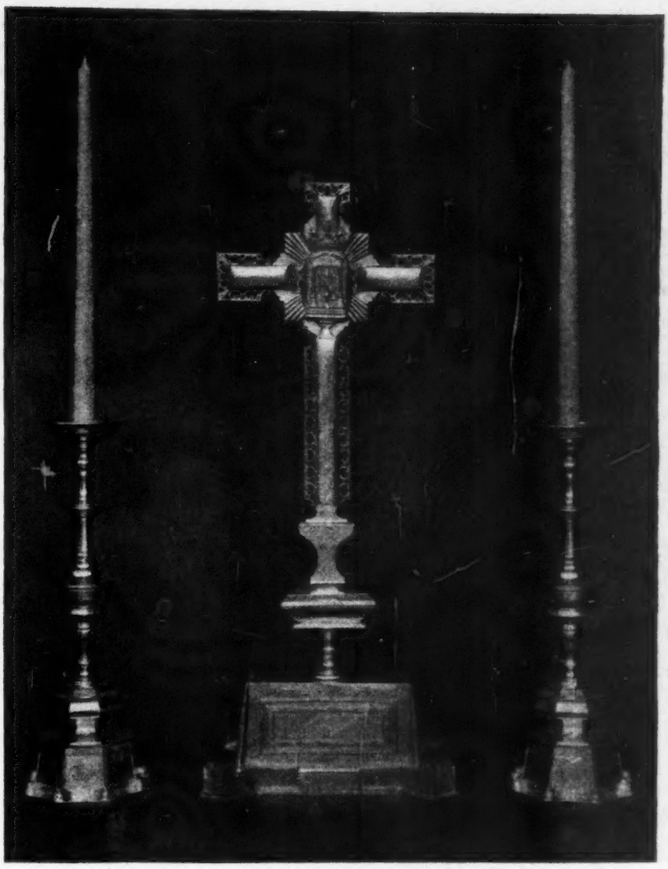
It was a view of the late Professor Lethaby, in animadverting on this growing multitudinous development of easel pictures that a solution lay in directing these energies, so often unequal for fine art, to the crafts—that the painter whose endorsement was insufficient to equip him for success in the former would find it in the latter. It is a comforting doctrine, no doubt, that the making of things of use beautiful can be achieved so easily. But will not the same misunderstanding of the nature of art affect almost equally the result? It is the nature of art which we have forgotten. A successful writer of novels has recently asked the question: "Why write novels"? and perhaps the wisest answer in regard to art was that made by an artist to an art student who consulted him as to taking up the profession: "Don't be an artist if you can possibly help it." From one knowing that a really creative impulse will hardly be withstood, and that no risk will be thought too great in following it, it was well said. Craftsmanship is implied in any work of art, but there is a pedestrian craftsmanship which includes no such implication.

Irish Hospitals and Slums.

Controversy about the Irish "Sweeps" continues, and so, with only the slightest abatement in popularity, do the great "Draws." Apart from the millions of money distributed in prizes, there remains the solid residuum of brick and concrete now going up all over Ireland in the form of new hospitals and new extensions. Much of the funds still remains for distribution between the individual hospitals, and there is a widespread feeling that before the proceeds are fully allocated a closer co-operation in control and scope should be insisted upon. We understand many of the difficulties that obstruct reform over here, and in Ireland religious ownership is a further complication, but the position is not beyond a bold solution. Moreover, there is also a growing demand that the hospitals should surrender further help, at least for a couple of years, in order to divert the proceeds towards slum clearance and rehousing. It would not be so unselfish as it might at first appear, since by a large reduction in the material for their wards, they would accomplish a constructive economy and at the same time permit opportunity for reflection and reform.

Burmese Architecture.

An interesting lecture on Burma, its architecture, people and customs, was delivered by Mr. Maung Maung, an architectural student, at University College, on Friday last. A large audience greatly enjoyed a fluent and first-hand account of a land whose traditions and characteristics are comparatively unknown in this country. Among a large and varied selection of slides none was received with greater favour than a design by Mr. Maung Maung himself for a ceremonial staircase in the Burmese tradition, with an exquisitely designed and coloured wall painting behind. The lecture generally gave an excellent idea of the degree to which Burmese architecture is coloured by religion. It appears that with the exception of religious buildings, temples and pagodas—many of which are extremely beautiful—there is little permanent architecture other than of a European character.



SILVER ALTAR CROSS AND CANDLESTICKS FOR ST. JOHN'S CHURCH, WAKEFIELD, YORKS. DESIGNED BY MR. D. M. MICKLETHWAITE, A.R.I.B.A.

A Renaissance of Craftsmanship.

Professor A. E. Richardson, F.S.A., F.R.I.B.A., who proposed a vote of thanks to the lecturer, made the important announcement that there has been formed a new society—the Honourable Company of Craftsmen—with the object of heading a renaissance of handcrafts and craftsmanship. The first public meeting of this society will be held on Monday, October 23, at 3 o'clock, at the Royal Society of Arts, Adelphi, W.C. All craftsmen are invited to attend.

Altar Set in Sterling Silver.

The altar set which we illustrate on this page was presented in her lifetime to St. John's Church, Wakefield, by the late Miss Ada, in memory of her sister the late Miss Mary, Micklethwaite, both of whom are, incidentally, benefactors of Westminster Abbey. Upon a draped pedestal stands a sarcophagus, above which rises the cross. In the centre of the cross the Veil of the Temple is shown rent in twain at the time of the Crucifixion, disclosing the monogram—"I.H.S." Above is a crown of glory and around the centre piece are rays of light. The candlesticks, the upper parts of which are circular in plan, are carried upon octagonal bases. The height of the cross is 2 ft. 5¼ in., and of the candlesticks 1 ft. 5 in. The work, executed throughout in sterling silver, beaten cast and repoussé, was designed by Mr. D. M. Micklethwaite and carried out by Mr. W. Bainbridge-Reynolds, of London.

A Norman Door.

The west door of Etton Church, East Yorks, which we illustrate on page 606, is an example of Norman work interesting as being one of the purest and most typical specimens of the style in the country. Our reproduction is from a measured drawing by Mr. E. J. White, A.R.I.B.A.

GENERAL NEWS

Professional Announcement.

Mr. R. W. Knightley Goddard, architect, will in future conduct his practice from 133, Denmark Hill, S.E.5. Telephone number, Brixton 1065.

Institution of Sanitary Engineers.

The Council of this Institution have unanimously nominated Mr. Godfrey M. C. Taylor, M.C., M.A., M.Inst.C.E., F.R.San.I., F.I.S.E., M.Inst.W.E., as President of the Institution of Sanitary Engineers for 1934.

Surrey Petrol Stations.

Surrey County Council have adopted by-laws prohibiting the erection of petrol-filling stations in some 30 rural areas in the county "on the grounds that they are places of rural beauty or are of interest because of their picturesque character."

Birmingham Housing Record.

Mr. Neville Chamberlain (Chancellor of the Exchequer) will formally open Birmingham's forty-thousandth municipal house—on the Weoley Castle Estate—on October 23. The occasion will mark not only a remarkable record, but the end of one phase of the Corporation's activities, as future efforts are to be concentrated on slum clearance.

The Jockey Club, Newmarket.

The Jockey Club rooms at Newmarket are to be rebuilt. Historical parts will be left much as they are, but the front is to be rebuilt, and there will be a courtyard with rails in front. Professor A. E. Richardson, F.S.A., in conjunction with his partner, Mr. C. Lovett Gill, F.R.I.B.A., 41, Russell-square, W.C.1, will prepare the plans.

Exhibition of British Art.

The Lecture Committee of the Exhibition of British Art (January-March, 1934), Royal Academy, has available a list of lecturers on the various forms and periods of British art to be shown at the exhibition. Inquiries should be addressed to the Hon. Secretary, Lecture Committee, Exhibition of British Art, Burlington House, W.1.

National Central Library.

The King, accompanied by the Queen, hopes to open the new building of the National Central Library in Malet-place, London, W.C., on Tuesday, November 7, at 3.15 p.m. The new building has been provided and equipped by the Carnegie United Kingdom Trust at a cost of about £50,000. The architect is Mr. H. A. Gold, F.R.I.B.A. Messrs. Chessums, Ltd., have carried out the building work.

St. Neots Housing Scheme.

The St. Neots Council propose to erect 20 non-parlour type houses at The Crescent, Huntingdon-road, St. Neots. Qualified architects are invited to offer their services, with particulars of their qualifications, fees required, etc. A form of application can be obtained from Mr. H. A. Walker, Assistant Clerk to the Council, High-street, St. Neots, to whom applications (enclosed in sealed envelopes, endorsed "Architect") should be sent not later than Tuesday, October 31.

A Proposed London Mansion.

Lord Rothermere has purchased St. Dunstan's, Regent's Park, N.W.1, with its large grounds, for the purpose of erecting a town mansion. The present house will be demolished. Drawings, which show an Anglicised Spanish-Colonial type of building, are in course of preparation by Mr. Gerald Warren, F.R.I.B.A., Amberley House, 12, Norfolk-street, Strand, W.C.2. The building contract has been placed with Messrs. Higgs and Hill, Ltd., Crown Works, South Lambeth-road, S.W.8.

CORRESPONDENCE

Building Trade Wages.

SIR,—It is not with the desire to split straws that I reply to Mr. J. R. Taylor, but his bold assertion makes a reply necessary.

If Mr. Taylor were to get into touch with the older "school" of builders' foremen, men who were foremen before August, 1914, and make a few inquiries, I am sure he would find that the old and observant men, experienced in the trade as it used to exist, would soon disabuse his mind as to the output in man-hours now being equivalent to that of the 1914 period. I admit that some sections of the trade, the navvy and labourer, are up to the standard, but it is not so with the craftsmen. In the last five years I have had many reasons to note changes and differences. I will say that in the Midlands one can trust the contractors: they are excellent organisers, and out for efficiency on a job. Competition is keen and prices have to be cut; hence they are fully alive. I have often heard the old workers tell the "young blood" of being "flabby," and one can see it on a job quite easily.

I know that there are some young foremen on jobs who will contradict the assertion, but there are men who were at school in the period named, excellent fellows, perhaps, possessing a technical school training and certificate, and a lot of theory, but they started work after the forty-four hour week came into being, and they are not, as a rule, men with a long experience of the trade. The older man, well over sixty, will soon tell the truth and set one's mind at rest on the point.

If I were to relate my experience, and limit myself to the period from March, 1920, to now, I am afraid I should fill *The Builder* from end to end, but I will simply ask those who doubt to get into touch with the foreman or the builder's estimating clerk who was in the trade before 1914, and make a few inquiries, and they will find my assertion amply substantiated. My knowledge of the trade goes back to the time when we worked from 6 a.m. to 6.30 p.m., and on Saturdays from 6 a.m. to 4 p.m., and that is a few years ago.

I think the expression "man-hours" is a rather recent definition, and, if my memory serves me right, it is a post-war phrase. I think it was first used in the military manuals. I found it first in a Royal Engineers' handbook in 1915. E. B.

The Hornsey Competition.

SIR,—May I write and congratulate both Mr. R. H. Uren and Mr. Cowles-Voysey on having heard Stockholm calling, and provided the Corporation of Hornsey with something other than the all-square, tight-at-any-price plan, so long dominant in competitions of this type in England.

I can write all the more feelingly, having struggled vainly for months with the all-tight and the all-square. GEORGE DRYSDALE.

Official Architects.

SIR,—With reference to correspondence published as to the possible formation of an Institute of Official Architects, may I remind your readers that the Official Architects' Association, formed in 1919, is still in being, and also that the Salaried Members' Committee of the R.I.B.A., on which I have the honour to serve, has several officials in its membership.

It would appear that any further organisation, as suggested, is unnecessary.

W. T. CURTIS.
Middlesex County Architect.

Reconditioning Small Houses.

SIR,—I have been much interested in the "Essays on Building Subjects," contributed by John Raywood, in the Building Trade section of your journal. The article upon the "Reconditioning of Small Houses" I consider particularly instructive at this time, when we are so much concerned with this subject. The writer, whilst carrying us back to the origin of the houses now to be dealt with, applies his experience in a way which I feel all concerned with the management of property will appreciate, and his suggestions as to reconditioning and reconstruction are very helpful. I look forward to his further articles.

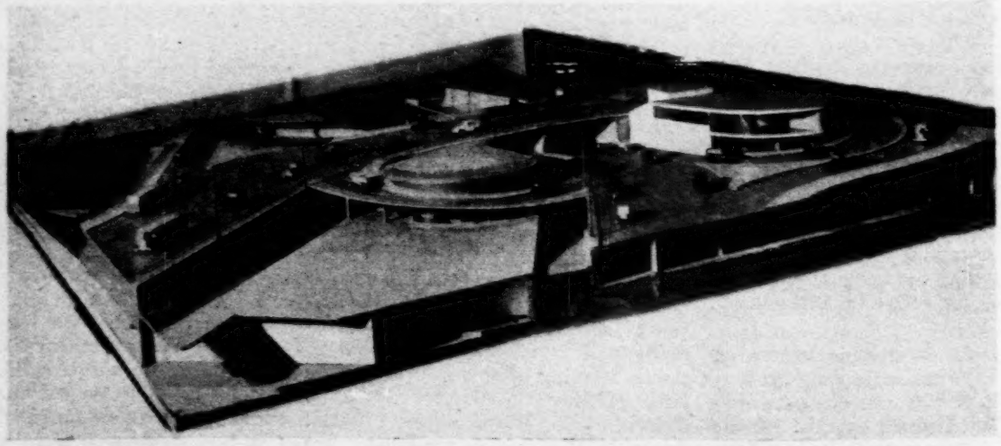
H. V. KITCHING.

Whitchurch, Salop.

COMPETITION NEWS

Lay-out of Building Estate, Cardiff.

Mr. James E. Turner, J.P., invites architects and town planners to submit designs for the lay-out of a seven-acre building estate at Penylan Hill. Premiums of £100, £50, and £25 will be awarded. The assessor is Mr. Percy Thomas, O.B.E., F.R.I.B.A., of Cardiff. Conditions may be obtained, upon deposit of £1 1s., from Messrs. E. Turner & Sons, Ltd., Penarth-road, Cardiff.



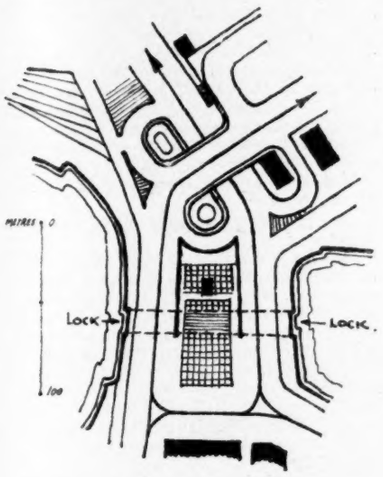
MODEL OF THE NEW TRAFFIC CENTRE, STOCKHOLM. (See facing page.)

IMPRESSIONS OF SWEDEN—II

THE STOCKHOLM BOTTLE-NECK (SLUSSEN).

By FRANK BENNETT, A.R.I.B.A.

STOCKHOLM grapples vigorously with its traffic problems. There is a bottle-neck in the middle of the town, congesting the thickest flow of traffic. Forty thousand vehicles and 250,000 people pass through it every day, which is nearly as bad as Hyde Park Corner, and perhaps worse, because of their trams. It is as if all the traffic in London had to pass across one bridge instead of five or six. It has been estimated that in a few years traffic in Stockholm may conceivably double itself. This bottle-neck, called "Slussen," which means "The Lock,"



PLAN OF NEW TRAFFIC CENTRE, STOCKHOLM.

is a little isthmus between two large islands. It cannot be pushed out sideways to make more room, so it was decided that the whole of Slussen should be rebuilt. An engineer and also an architect (Mr. Tage William-Olsson) were appointed to make a design and to carry out the work of reconstruction, which is now already half completed.

The approved design embraced the "clover leaf" system of erecting two roads at different levels in place of one road, and linking them together with circular ramps like the leaves of a clover. But on their own account the designers departed from the symmetrical design first approved by the municipality. It smacked too much of the Renaissance, they felt. Instead, they designed a structure which arose more directly out of the peculiar limitations of the isthmus and logically fulfilled the new purpose required of it.

Mr. William-Olsson was kind enough to take me over the work, graphically describing its main points and showing me many of the drawings and models for it. The drawings displayed a puzzling network of contours. Only by models, Mr. William-Olsson explained, could the scheme be properly grasped, and even then parts of the surrounding layout must be left over for decisions later on. He wanted to see part of the new structure completed before he could make up his mind about the surroundings.

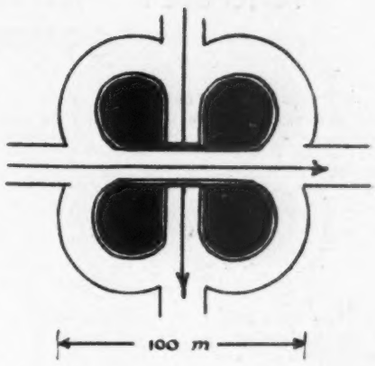
The hub of this traffic centre is now pushed further back, and the space under the ramps filled in with shops and offices. A central space forms a kind of small Trafalgar-square, and the new lock for barges flows through underneath it. When the scheme is completed the streams of traffic flowing in from the four roadways will be able to pass through Slussen almost unchecked.

The construction presented many difficulties. There is barely one right angle, and the mixture of structural steel and reinforced concrete fits together virtually on a plastic principle. All steel sections are stock sizes without plates. All joints are welded, and there are no rivets. "Welding has been a God-send . . ." they say.

Ordinary piling refused to take a grip amongst the refuse of many centuries accumulated under the old Slussen, so they employed Belgian piling, which is a method of boring a hole, first by ramming in a steel tube, and then pouring down concrete, and afterwards pulling out the tube.

This reconstruction of Slussen bears pertinently on the bigger town planning scheme put out to world competition last year and now being judged. Slussen deals with traffic congestion on one side of Stockholm, but not on the other. To the north, roads of the Bond-street type trickle among old but established houses before they arrive at the wider, modern part of the town. The Palace, the Parliament House and the new town hall itself are all mixed up with the old houses and the waterfront. At one point the main line trains still have to slow up to cross a street, as do the trains at a level crossing in a country village. Ostberg feels keenly the need for a better waterfront leading out to the town hall. Some models in the town planning office of the town hall, made by fifth-year students when Ostberg was professor of the Academy, show methods of solving the problem which this object creates.

The present problem, the subject of the world competition, can be solved, perhaps



THE "4-LEAF CLOVER."

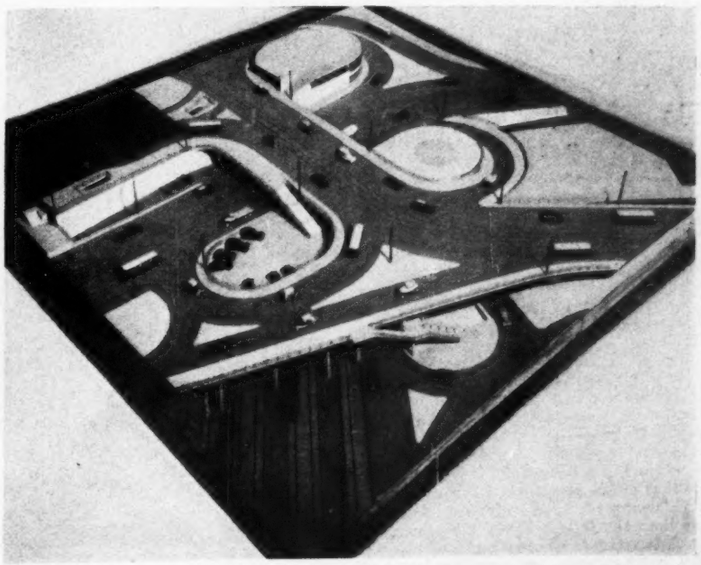
easily, by a ruthless cutting away of old buildings, but the winning design will have to suggest a more subtle expedient if it is to write an important chapter in the history of town planning.

(To be continued.)

VIEW OF SLUSSEN WHEN COMPLETED.

The Royal Scottish Academy.

Sir George Washington Browne, who is 80 years of age, and was elected in 1924 to the presidency of the Royal Scottish Academy, Edinburgh (the first architect to hold that position), has announced his intention of retiring.



MODEL OF NEW TRAFFIC CENTRE, STOCKHOLM.

HORNSEY MUNICIPAL BUILDINGS COMPETITION

An inspection of the two hundred odd schemes submitted for this competition confirms the view we expressed last week, that in making this award the assessor paid particular attention to the two conditions which were peculiar to this site : the fact that it was enclosed by buildings and building sites over which the council had no rights of light, and the need for keeping a sufficient open space to provide a forecourt for parking cars and the connection of Hatherley Gardens with the Broadway.

There are a number of first-class plans, but most of them fail when tested by these two conditions, or have the defect of placing the public assembly hall at the rear of the site behind the council offices, thus creating two lines of traffic from Broadway, which, with the noise attendant on motor traffic, is undesirable when it can be avoided. Many of the plans show long passages with little or no direct natural lighting, and others, which have a central court with offices round it, have not taken advantage of this for lighting, but place their corridors adjoining the central court and the offices on the outer faces. Other schemes show the assembly hall in the centre of the plans; at first glance several of these appear excellent, but if the problem of direct access for the public without passing through the municipal block is considered, the difficulty of this solution proving acceptable is seen in nearly every plan of this type. In most cases the elevations of the best planned schemes are singularly lacking in interest, while several sets, with quite interesting and original elevational treatment of the main façade, have plans which for one reason or another are not very successful. In one case the assembly hall is placed on the first floor, while another quite interesting scheme has the borough treasurer and rates office in the basement. The great majority of the plans are symmetrically arranged on a central axis : this looks well on paper, but on this particular site has little value, at any rate as far as the elevations are concerned, as most of them would only be seen in sharp perspective, if at all.

The Premiated Designs.

Turning to the premiated schemes, all of which were illustrated in our last issue, as one competitor put it "The winner has a stroke of genius which make the rest look silly"; and although this is perhaps a rather exaggerated statement, it has a basis of truth. Like most good plans, the winning design looks almost childishly simple in its directness; yet, apart from several rather obvious minor defects (probably due to lack of experience), it is certainly a logical and practical solution, with a touch of genius—the treatment of the main façade.

The two other premiated designs both have numerous defects in plan and elevation, but on balance the award is justified. Both have appreciated the importance of adequate lighting for rooms and main corridors, and both have the main entrance to the assembly hall from the Broadway. Here the similarity ends.

In both designs the treatment of the main façade is unsatisfactory. In the second premiated design an attempt is made to differentiate the entrances to the assembly hall and the municipal offices, but the result is not happy.

In the third premiated design the upper floor for more than half its length rests on rather inelegant stilts, which would possibly look better in an actual building than they do on the drawing.

If for a moment we turn from the plans to the method of presentation, it is interesting to note how much more effective are the elevations which are rendered in Indian ink monochrome than the fully coloured elevations. It is also interesting to note that several competitors indicate rural surroundings on their ground plan and sometimes in their elevations, although the essence of the problem was obviously building for a site entirely surrounded by other buildings. Such artistic licence does not show schemes to their best advantage and necessarily causes a doubt as to whether their authors have appreciated the programme. It is also worth noting that the premiated designs and several others of great merit do not rely on colour on plans to distinguish their various parts. And the yellow skies and purple patches, the ornamental lettering and scrolls have now definitely departed. The general level of draughtsmanship is high, and where it falls below this standard we suspect that lack of time and not lack of ability is the cause : in this connection it is interesting to note that it appears to be an almost infallible rule that the merit of a design varies inversely with the number of sheets required to present it. This may have a psychological explanation, due to the fact that the mind of the skilful planner is economical in the use of space, and realises that a nicely balanced sheet is, in itself, a thing which may just tip the scale between two plans of equal merit.

Other Schemes.

Turning from general remarks to more particular criticism, we are faced with the problem of selection from a mass of good material; if this selection leaves—as it must—much good work unnoticed, it is because the plans we mention have certain features both good and bad which are of general interest.

Messrs. Lanchester and Lodge send a brilliant set of plans* which, if considered without reference to the particular conditions and peculiarities of the site, would be the best in the exhibition. The main elevation is not, however, of the same interest. The assembly hall, placed at the rear of the site, is not perhaps sufficiently cut off from the municipal block as the main corridors run right round it. Corridors on these lower floors are rather inadequately lighted.

The only "highly commended" plan is, apparently, by the same authors as the design placed second, Messrs. Grey and Martin-Smith. It is an ingenious solution of the problem which has baffled so many other competitors : how to provide direct public access to a hall in the centre of the plan without touching the circulation of the municipal block which surrounds it. The solution here adopted is to place the assembly hall in the lower ground floor with the entrance to the municipal block on a mezzanine—reached by two flights of steps—above it. The planning is simple and direct; its chief defect is the lack of adequate lighting to internal passages and corridors and on lower floors. The elevations are rather uninteresting and suggest a lost opportunity for original design.

Messrs. Collcutt and Hamp (Mr. Stanley Hamp) send a scheme which is attractive in many respects and shows a good appreciation of the possibilities of the site. The plan is irregular in shape : the assembly hall is placed on the right and is set back to give a large open "place" in front of the main entrance. On the left the municipal office block runs forward almost to the Broadway and extends back alongside the assembly hall for its full length. But the plan has two defects—a rather long flight of steps up to the municipal entrance of the assembly hall, which would make access difficult for aged and rheumatic persons, and also that the borough treasurer's department and rates office—which is one of those most frequently (albeit unwillingly) visited by the public—is placed in the lower ground floor.

The elevations are interesting and attractive.

Mr. Berry Webber sends a plan which is an excellent example of directness and good proportion. His assembly hall is placed at the rear of the site, but is approached without difficulty by a covered way (beneath the council chamber on the first floor) and a large central court. On each side of this are the two departments to which public access is most necessary—that of the borough treasurer and public health. Two large garages and a cycle store adjoin the assembly hall on the east of the site.

The conflicting proportions of the three arched openings on the ground floor, with three similar arched openings to the balcony or loggia in the council suite over, are unhappy. The chief defect of the plan is the rather large space devoted to the approach to the two staircases near the main entrance, and the fact that no use is made of the central court for lighting offices on the upper floors, possibly due to a desire to minimise the disturbance caused by motor traffic when the assembly hall is in use. The assembly hall is also a long way from the council chamber.

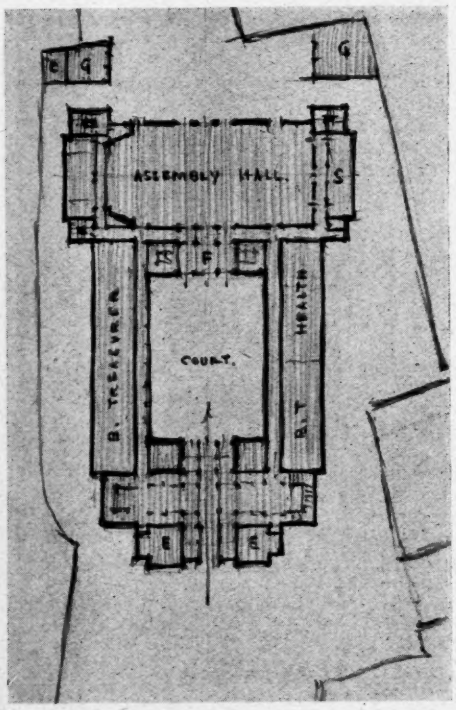
Mr. Percy Thomas shows a very compact and logical plan, similar in many respects to the foregoing. The assembly hall is placed at the rear, and is approached not by an open central court, but by two roads on the north and south sides of the main block. The main entrance (in the centre of the Broadway façade) leads to a fine staircase and, beyond, to the rates office, which is in the centre of the building and separated from the assembly hall by an open court. The rest of the ground floor is occupied by the borough treasurer's and unemployment department, etc. The garage and cycle store is planned in the south corner of the site. This plan has the defect that access to the assembly hall and garage would cause traffic all round the building : the main corridors on the ground floor appear to have no natural light or ventilation.

Mr. Naseby Adams and Miss Nauheim show a scheme which has several good points and which has been designed to fit the site. Here, again, the chief defect is a lack of daylight and direct ventilation to the corridors. The elevations are simple and direct and strike a more modern note than most.

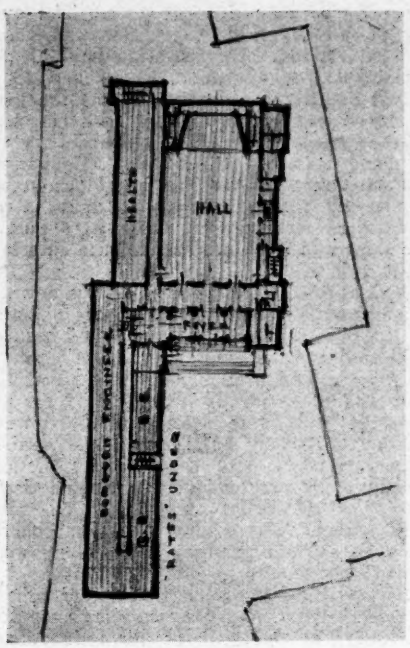
Mr. S. W. Davis has an interesting brick façade of a distinctly modern type, but his assembly hall on the first floor is a mistake in an otherwise well schemed plan.

Messrs. Arthur Cooksey and Partners send a scheme which, at first glance, is interesting, but a more detailed inspection reveals the fact that the idea has created difficulties in plan which have not been very successfully dealt with. The elevations show a modern brick treatment with considerable originality and character.

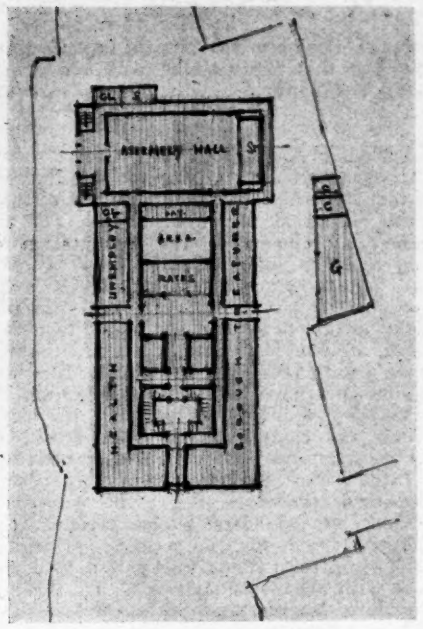
* We publish part of the design this week.—Ed.



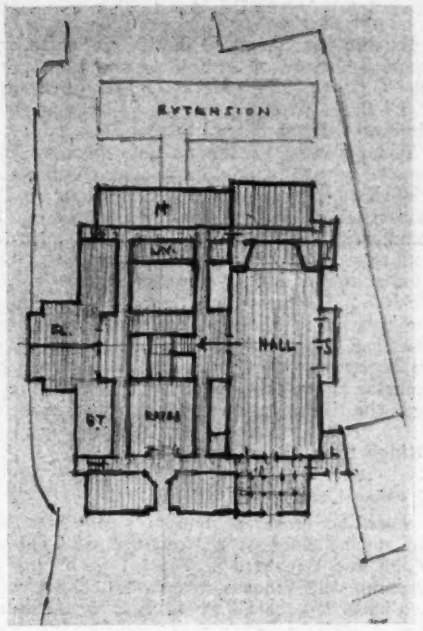
SKETCH GROUND FLOOR PLAN OF MR. E. BERRY WEBBER'S DESIGN.



BY MR. STANLEY HAMP.

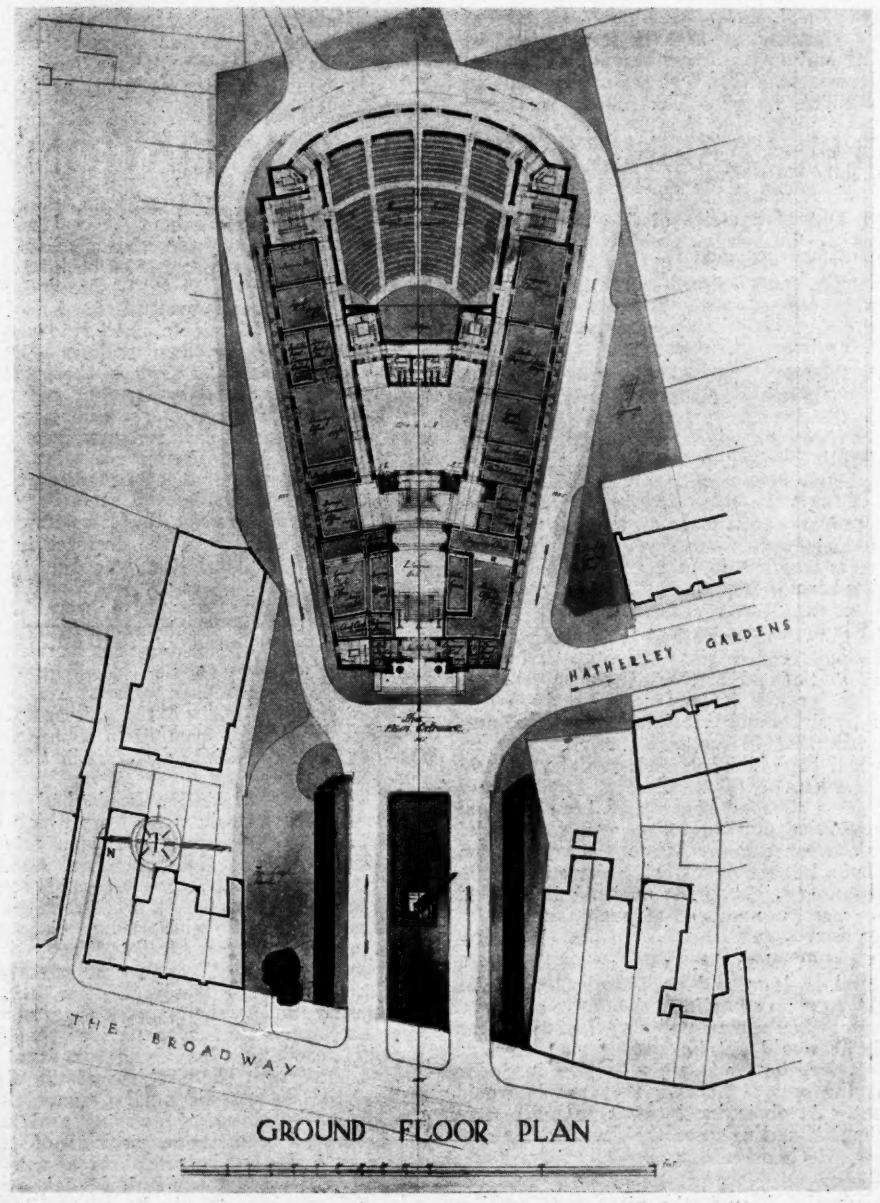


BY MR. PERCY THOMAS.

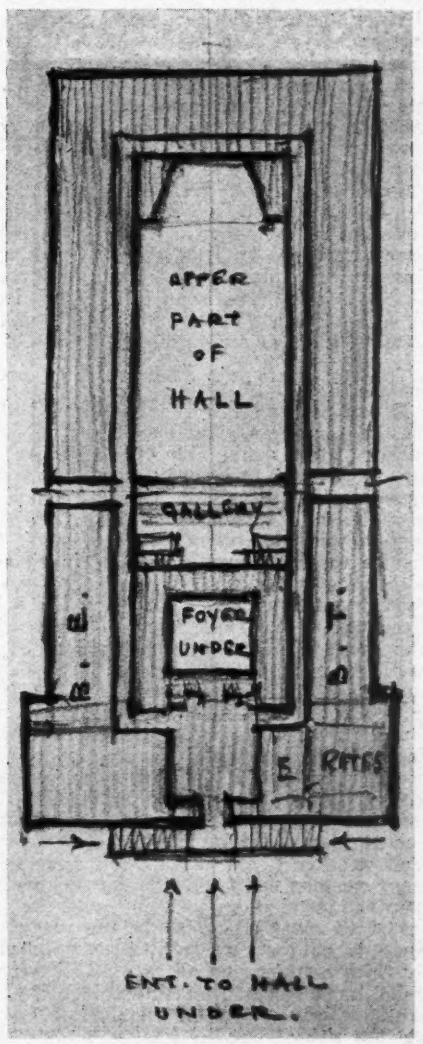


BY MR. W. NASEBY ADAMS AND MISS NAUHEIM.

SKETCH GROUND-FLOOR PLANS.



BY MESSRS. LANCHESTER & LODGE FF.R.I.B.A.



Sketch Plan of MESSRS. GREY and MARTIN-SMITH'S "Highly Commended" Design.

HORNSEY MUNICIPAL BUILDINGS COMPETITION.

MODERN CINEMA DESIGN

Before the Sheffield, South Yorkshire and District Society of Architects and Surveyors, on October 12, Mr. J. R. Leathart, F.R.I.B.A., read a paper on "Tendencies in Modern Cinema Planning and Design."

The planning of the modern cinema, commenced the lecturer, followed at the heels of scientific progress. As new inventions for the perfection of talking pictures proved to be commercially profitable, the cinema adjusted and readjusted its plan to preserve the balance necessary for the advancement to be consolidated. There was little doubt that up to the introduction of the talking film, cinema planning had reached a point beyond which no improvement was vitally necessary. No acoustic necessities governed the plan shape, and the illumination problem was met by the simple procedure of hanging lighting fittings from the ceiling.

Sighting Lines.

Scientific research in film production had had no influence on the question of sighting, which had remained a constant problem confronting the cinema architect. There were two by-laws controlling sighting, and two recommendations of the "eye-strain committees" which had to be observed. The first governed the rake of the auditorium floor, which must not exceed a rise of 1 ft. in every 10 ft. horizontal run, and that might occasion difficulties in sight clearance from the rear seats unless the screen were pitched fairly high. The second rule prohibited a greater rake than 35 deg. for the balconies, which in a double-tier house was an irksome regulation. The question of eye-strain was governed by the rule that the eye-level of the first front row of seats had to be in definite relationship, as regarded vertical angle of vision, to the top of the screen. Thirty-five degrees was the maximum. With the proposed introduction of the wide screen, which also increased the height by some 10 ft., a loss of several front rows of seats was a probability which proprietors must be prepared to face. A higher screen, too, tended to raise the balcony to obtain clearance from the rear seats under; that, in turn, increased the height and volume of the auditorium. For that reason the advent of the wide screen would be long deferred until at least cinemas were specially planned to take them. That was a demonstration of scientific technical development dictating a revision of the accepted ideas of auditorium shape and size.

Designing for Acoustics.

Experience and research had proved that the volume of an auditorium must be kept within certain defined limits if excessive reverberation was to be avoided, and as low a figure as 120-130 cub. ft. per seat had been suggested as a maximum. In practice, however, it was somewhat difficult to confine the volume to that figure, especially in cinemas with large balconies where the height had to be sufficient to prevent a crushing effect being given to the top-most seats. The talking film produced primary reverberations set up in the recording studio, which were in turn augmented by the reverberations set up within the auditorium itself. To reproduce the sound as originally taken, it was therefore desirable to eliminate those secondary or house reverberations as much as possible. That could be satisfactorily accomplished by reducing the volume to within the limits quoted previously; by the use of directional loud speaker horns behind the screen—the most common form adopted for talking apparatus installations—which could be adjusted to cover all seats; by the use of absorbents on the rear auditorium walls; and by thick carpeting on all floors, with heavily upholstered seats. In addition to those precautions, care should be exercised to eliminate the risk of parallel side-wall inter-reflection or flutter by absorbents either in the form of acoustic wall covering or by draping the walls with decorative banners or hangings. The fan-shaped auditorium, both in plan and section, counteracted to a great extent the tendency to acoustic imperfection, providing that the ratio of rear auditorium width to the proscenium width was not too excessive.

The Modern Auditorium Plan.

The lecturer, summarising the development of the modern auditorium plan, said that, having in mind the dual function of the present-day cinema in the presentation of stage and film shows, the fan shape both on plan and section with the expansion from the proscenium wall outwards and upwards might be said to be the best suited to obtain initial acoustic correction. That was the direct solution of the problem, and it was possible to achieve all that was necessary for satisfactory acoustics by shaping the auditorium and controlling the volume without the assistance of patent insulating materials at all. The indirect method (if such haphazard procedure might be termed a method) was to adopt an auditorium shape without regard for the acoustic principles, and then treat various ceiling and wall surfaces with absorbent materials. By the first procedure bright tonal value was assured with reverberation or over-tone resonance; by the second a flat, lifeless tone would invariably characterise all sound produced in the theatre. Seat volume should range between 120 and 170 cu. ft.; any figure over the higher figure should be avoided if excessive reverberation was to be avoided.

As the requirements of sound-correction had exerted an important influence on modern cinema planning, so had the development of lighting had an important bearing on internal decorative treatment. The arrangement of independent hanging electroliers was now generally considered inadequate. The question of auditorium illumination was, of course, a debatable one. On the other hand, it was contended that the film, which had to be shown in a darkened theatre, was the heart of the entertainment, and that the decorative lighting effects were therefore subsidiary and in many instances unnecessary. Conversely, the supporters of musical interludes accompanied by colour changes of light in the auditorium claimed that those were part of the show and therefore had definite entertainment value.

Reduced to its simplest possible form, a cinema needed to be nothing more elaborate than a bare funnel-shaped, darkened hall, devoid of decoration, of colour and of light. In time we should probably come to admit that that was so essentially logical, so fit for purpose, that the ornate interiors of to-day would appear ludicrously extravagant and futile.

In conclusion, said the lecturer, the outstanding current tendency in cinema design was for decorative forms to be internationalised. The highly individual characteristics of each country were being abandoned; there was no longer an attempt to keep stylistic decoration in isolated schools. The modern architect was studying decoration critically, stripping it of its redundancies, trying to get a stronger decorative effect with a greater economy of thematic material. In that direction he was looking with increasing confidence to the work of the lighting engineer. The illumination of painted traditional form and decoration was being superseded by the creation of colour derived solely from light, concealed or semi-concealed. The old trickbox of "traditional inspiration" was being generally abandoned, and accepted classic forms were being given a free, fresh and highly imaginative treatment, as in the latest Scandinavian work.

THE ARCHITECTURAL ASSOCIATION

THE SLUM PROBLEM.

The first of a series of five non-technical lectures on the housing problem was delivered on Saturday afternoon at the Architectural Association in Bedford-square, W.C., the lecturer being Mr. E. Maxwell Fry, A.R.I.B.A. The chair was occupied by Mr. F. R. Yerbury.

The lecturer sketched the growth of the slum in modern England. Poverty, he said, made the slums. In Liverpool there had been an extremely good development in the eighteenth century, climbing up the slopes from the river, with wide streets and squares; but as the town grew development of good-class property took place on the hill top, and the old eighteenth century quarter down by the river was left to be occupied by Chinese lodging-houses, or put to other uses associated with extreme poverty and dirt.

The growth of cities had been going on all over England ever since the industrial revolution at the end of the eighteenth century, but that growth had very seldom been dictated by any sound principles. The usual process was that in the eighteenth century an area had been laid out with good houses and long gardens. Afterwards, first factories and then rows of small houses had been built on the gardens until a state was reached of complete congestion. When the small town became a large manufacturing city such a congested area might be its nucleus; in London there were a number of such centres of congestion.

At a time when there were no trade unions, no local by-laws and no Health Act, slums might grow up away from the centre of towns, because when a man put up a factory in the fields he would put up near it some rows of houses for the workpeople to live in. He built the sort of housing that people would accept. At their best, towns so built were mechanical and ugly; at their worst they consisted of back-to-back houses very badly built.

Gradually through the nineteenth century there had been an awakening of the social consciousness and, beginning nearly one hundred year ago, with the Act of Parliament that prohibited child labour in coal mines, we had come on to the legislation of to-day, but even last year a number of back-to-back houses had been erected in Leeds, and had been passed by the Medical Officer of Health. It was terribly difficult to instil into people a new idea and make them work it.

Taking Leeds as an example of the problem that had to be faced, the lecturer said that city had a population of half a million spread over a wide area, so that it was not very greatly overcrowded in comparison with other places. In this matter of overcrowding there had been a remarkable improvement compared with ten years ago, but this improvement was mainly due to the decrease in the size of families. Since the war the Leeds City Council had built really less than 10,000 houses, and even now there were 3,523 persons living in single-room tenements, and 10 per cent. of working-class houses had more than two persons per sleeping room. There were 75,805 back-to-back houses in Leeds, and over 32,000 of the older of these houses were built at from 70 to 80 per acre. The average superficial area of such a house was 350 square feet.

At December 31, 1931, Leeds had 4,109 registered cases of tuberculosis, on which the city spent £50,000—amounting to a rate of 4.7d. in the £. At the same time, 5.9d. in the £ was being spent on every possible aspect of housing, of which 2.45d. represented schemes connected with slum clearance. Tuberculosis arose practically directly from overcrowding, lack of hygiene and poverty.

Slum conditions existed in every town in the country, and in the aggregate represented something very much more serious than the housing deficit that had been found at the end of the war. The problem of the clearance of the slums could not be severed from the general problem of housing, and must be associated with some measure of town planning. If an industrial area was replanned, and the noxious factories taken outside, this would not only be more effective than building blocks of model dwellings on the sites of the slums within the area, but it would probably be less expensive.

ARCHITECTURE TO-DAY

THE necessity for the maintenance in the profession of architecture of high ideals of courage, truth and sincerity, as well as mere technical efficiency, was emphasised by Mr. William T. Benslyn when he delivered his presidential address to the Birmingham and Five Counties Architectural Association. The President said the present time might eventually prove to be one of the most important in the history of their profession. They had, he hoped, passed through the worst part of the depression which had affected for so many years the life of the nation, and on all sides they saw signs of greater activity and prosperity.

Building and Aesthetics.

Under modern conditions, it became increasingly important for them to visualise the great building industry as a whole, and they trusted that a time was not far distant when the architectural work which comprised such an important part of the work of that industry, would be entirely in the hands of qualified architects, and that architects would no longer be blamed for bad building with which they had nothing whatever to do. Attempts were being made not only to raise the standard of taste in the work done by speculative builders, but to produce a better and more efficient building at a smaller cost. In Birmingham they had recently formed a Consultation Board for discussion on matters affecting the building industry as a whole, and that joint board consisted of architects, surveyors and builders. He was sure there was a growing appreciation on the part of builders generally of the services which architects rendered, and he felt, also, a greater recognition on the part of architects of the important qualities of organisation and craftsmanship which builders supplied in the execution of their contracts. Another factor in the success of any building was the nature of the material used, and in this again there was considerable scope for collaboration. Many of them had felt for a long time that, if they were to advance as a profession, they must clearly differentiate between those things which were matters of taste and those things which were matters of fact. No other body in the world was in a better position than the Royal Institute to circulate facts relating to the building industry to its members, and it was therefore its duty to do so.

National Policy and Building.

The fruits of the policy of the restriction of public works were now beginning to be felt in the greater activity of private enterprise and, at the same time, essential public works were being sanctioned by the Ministry of Health. There was no doubt that in the near future many essential public buildings would be proceeded with in Birmingham, and he trusted that when the appropriate committees had to make a decision as to the appointment of architects for these buildings, they would pursue the policy of distributing the work as widely as possible to architects practising in that province. The notable buildings which had been erected by members of the Association, not only in Birmingham, but in all parts of their own province and in other parts of the country, bore witness to the unrivalled ability of their members past and present. The centenary of the building of the Town Hall brought one at least of those distinguished buildings to their minds, and the proposal to rebuild King Edward's School on another site would, he trusted, result in the creation of a building not unworthy of the New-street building, which was justly regarded as a masterpiece of Sir Charles Barry and his association with Augustus Welby Pugin. The architect appointed by the Governors was fully cognisant of his great responsibility in this matter, and they greatly appreciated the fact that the Governors entrusted this most important work to a member of their Association. They could be justly proud of the contribution that the Association had made to architectural education. Their school was recognised in all parts of the country, and certainly in the London offices, as producing the soundest and most practical type of young architect.

The Value of Architecture.

It would be his aim during his term of office, said the President, as far as possible to convince the public of the value and necessity of employing in all building activities properly trained and qualified architects. The division of buildings into classes, in some of which it was thought necessary to have architectural dignity and in some of which it was not, was fortunately not so prevalent to-day as it was twenty years ago. There was scarcely a building of any class to-day to the success of which a well-trained architectural mind could not contribute something of value. Both the engineer and the architect had their own contribution to make, and it was seldom that one could dispense with the services of the other. The increasing scientific knowledge available to all had resulted in a more scientific outlook on life and thus towards architecture. The importance to human life of sunlight and air, bathing and other open-air activities was gradually being reflected in architecture. The more frank appreciation of structural forms year by year was causing a freshness of treatment and a greater sense of reality and adaptation to purpose in architecture, and this was most evident and appropriate in those buildings which had no definite tradition behind them. The greater simplicity of surface, the selection of beautiful materials and colour, and the adaptation of design to utilise the labour of machines, as well as men, pointed the way in which architecture was moving; but in architecture, as in all other matters, judgment, tradition and good taste must always play their part, and a due regard for the work of others—in fact, a certain humility in their approach to a problem—would often be quite as important as any great inventive capacity. To condemn anything as bad because it was new was just as foolish as to praise anything bad because it was old.

SOCIETIES AND INSTITUTIONS

ARCHITECTS OF IRELAND.

Sir Raymond Unwin, P.-P.R.I.B.A., recently addressed the Royal Institute of the Architects of Ireland at the Mansion House, Dublin, on "Planning Towns for Modern Life," and suggested that as the home should be to the family, so the town should be to the community. A town-planning consciousness, he thought, should be cultivated by every class of city and town dweller. It was on the development of such a consciousness that depended the twentieth century's hope of the city, town and village beautiful. The present was a splendid opportunity for better town planning, and multitudes who were receiving unemployment benefit could be profitably employed in house building and the money thus diverted to wage channels.

PRESERVATION OF RURAL ENGLAND.

The Council for the Preservation of Rural England held its sixth annual conference at Buxton at last week-end. At one session, at which Professor Patrick Abercrombie, of Liverpool, presided, the special case of the Peak district was considered. A general discussion was opened by Mr. G. L. Pepler on "Joint Planning for Beautiful Regions such as the Peak." The speaker suggested that the local authorities and the planning committees should first approach the landowners. He said the owners were often the first to desire the preservation of beautiful country. He explained in detail the powers given by the Town and Country Planning Act of last year, and showed how very much could be accomplished by planning without incurring any public expense at all on compensation.

Mr. Henry Stone (Nottingham), representing the Rural District Councils' Association, explained in a paper the powers and duties of the local authorities and planning committees for safeguarding amenities, and urged that there were now ample powers to check all abuses if only the authorities would make full use of them. For instance, regulations could be imposed as to the number, use, size, design, or external appearance and spacing of buildings. Building operations could be prohibited or restricted pending the operation of a general development order, or building might be prohibited or restricted permanently on certain grounds.

A series of resolutions on the Peak district was afterwards passed unanimously. The conference first asserted that it was essential that the Peak district should be regionally planned if its amenities were to be safeguarded. Other resolutions recommended that the executive joint planning committees already set up in the region should be consolidated and extended; invited the co-operation of the local authorities for the purpose, especially the Derbyshire and Staffordshire County Councils; and proposed that in order to secure harmony of action over the whole area there should be a Peak District Advisory regional council constituted by the interested county councils, the cities of Manchester and Sheffield, and the county borough of Stockport.

A.A.S.T.A.

Copper in Architecture: The Green Patina.

Dr. W. H. J. Vernon, of the Chemical Research Laboratory of the Department of Scientific and Industrial Research, lecturing at the Science Museum, South Kensington, on Copper in Architecture, before the Association of Architects, Surveyors and Technical Assistants, said that the use of copper for roofing was at one time severely restricted in this country on account of the greater skill required in its erection as compared with lead. For this reason the dome of St. Paul's was covered with the traditional lead, although the use of copper had been seriously considered by Wren in view of the great saving in weight that would be effected thereby, and the stability of the metal in the event of fire—the melting of the old lead spire in the Great Fire was then a vivid memory.

In recent times one great attraction of copper to the architect was the development of the well-known decorative green patina in course of exposure to the open air. In this respect copper was unique among roofing materials. The composition, properties and reproduction by artificial means of the patina had been the subject of investigation at the Chemical Research Laboratory of the Department of Scientific and Industrial Research. In these investigations it was early found that urban samples of patina consisted essentially of basic copper sulphate and not copper carbonate as was previously supposed. That clearly showed that sulphur dioxide in the air, a constituent of polluted air, and not carbon dioxide, a constituent of pure air, was the predominant atmospheric factor in the formation of the green patina. That view was supported by the fact that the patina was more difficult to produce in rural districts than in towns. It was, however, possible to achieve the effect artificially by an electrical method in which the metal was immersed in a solution containing dissolved sulphates with the addition of an oxidising agent. After a treatment of 15 minutes' duration under the proper conditions of corrosion and temperature, a patina was produced of a good green colour which is insoluble in water.

Baptist Church, Belper, Derbyshire.

The work of renovation at this church has just been completed. Erected in 1893, it superseded a building dating from 1818, now used as a school. Previous to the renovation the building was not only dilapidated, but had a colour scheme altogether out of keeping with the architectural characteristics of the edifice, which have now been given their rightful place. Electric light has been installed. The work was under the supervision of Mr. Leonard F. Smith, L.R.I.B.A., of Belper.

ILLUSTRATIONS

PLATES.

Church of St. Chad, South Norwood.

This church is built of brown bricks with purple quoins and string courses, the bricks running five courses to the foot. The roof is covered with Westmorland green slates. A certain amount of reconstructed stone, resembling Portland, is also used.

Internally the walls are plastered an almost pink tint and the roof and woodwork generally stained grey. A certain amount of orange red paint is employed in small quantities. The altar rail, pulpit, etc., are in black and white tiles, the altars in cream-coloured marble, the floors in woodblock and 12-in. quarry tiles.

Mr. Lacey, of Hounslow, was the builder, and the following firms were associated with the work: Messrs. Beaven, heating; Anderson and Angell, electric light; Stevens and Adams, floors; Van Straaten and Co., wall tiles; Fenning and Co., marble work.

The contract amount was £10,997. The cost of the church and presbytery is in the neighbourhood of £16,000.

Messrs. Leonard Stokes and Drysdale are the architects.

Morden College, Blackheath, New Hospital and Staff Quarters.

The new hospital and staff quarters, designed by Sir Banister Fletcher, P.-P.R.I.B.A., F.S.A., for Morden College, Blackheath, were opened on October 17, by Prince George. The College, which was designed by Sir Christopher Wren, bears witness to the spirit of benevolence of the age in which it was built, and in its design well expresses the comfort of home. It was founded by Sir John Morden in A.D. 1695 to house 40 distressed merchants, and since A.D. 1884 is has been administered by trustees elected from the Court of Aldermen of the City of London, whose chairman, Alderman Sir T. Vansittart Bowater, Bart, M.P., laid the foundation stone for these additions in July last year, the tercentenary year of the birth of Sir Christopher Wren.

The new wing, which is shown on the right-hand of the aerial view which we give, contains wards for the sick members of the College and doctors' consulting room, in addition to suites of rooms for the matron, nurses, and the College staff.

The additions, with the colonnade in Portland stone, have been designed to be in harmony with Wren's building. The facing bricks, in brown and purple stocks, were specially selected for colour and texture to blend with Wren's charming brickwork, whilst the chimney stacks, the hipped roofs, the deep-coved cornice, the sash windows and brick and stone entrance doorways, were all designed in sympathy with the main block, to which the new wing forms a harmonious addition.

The general contractors were Messrs. Pitchers, Ltd. Among the principal sub-contractors were :—Matthew T. Shaw and Co., steelwork; Damer Bros., stonework; Rosser and Russell, hot water and heating installations; John Bolding and Sons, sanitary fittings; A. J. Hewens and Sons, electric lighting and power; Art Pavements and Decorations, Ltd., wall and floor tiling; Ragusa Asphalte Co., asphalt work; W. Bainbridge, Reynolds, Ltd., iron gates, balustrade and grilles; W. Baxter Elliott, artificial stone paving and staircases; J. A. King and Co., Ltd., "Glas-crete" roof light over colonnade, self-centring flooring tubes, and pavement lights; J. F. Ebner, oak flooring; Thos. Elsley, Ltd., rainwater heads; J. Stone and Co., Ltd., fire hydrants; Henry C. Parker and Co., hand-made multi-coloured stock bricks; Carter and Youlton, Ltd., roof tiles

Hornsey Municipal Buildings Competition.

We illustrate this week some parts of the design submitted in this competition by Messrs. Lanchester and Lodge, FF.R.I.B.A.

Manor Farm House, Headington, Oxford.

The original structure of this work comprised an old stone-built farmhouse in the traditional Oxfordshire manner. The building was purchased for conversion to private residential purposes. During the pulling down a section of oak panelling, hitherto lathed and plastered, was revealed, and after restoration to its original condition, was used as part of a screen in the entrance hall. The new sitting room wing and staircase bay have been added in a manner sympathetic to the original building, and old materials from adjoining barns have been utilised as far as possible. These additions made it possible to construct the formal gardens shown in the illustration in place of derelict outbuildings, and the gravel path leading to the then existing entrance.

The whole of the interior was remodelled, and the original oak beam ceilings exposed, which had apparently at some later date been covered over by two plaster ceilings. The original stone floor, which had been cemented over to a large portion of the ground floor, was taken up and relaid, restoring the old character of the building.

The general contractors for the work were Messrs. Benfield and Loxley, Ltd., of Oxford, and the following sub-contractors were also employed: Saml. Elliott and Sons (Reading), Ltd., panelling; Fred G. Alden, Oxford, heating and hot water and electric lighting; Adrian Stokes and Co., metalwork; Carter and Co., London, Ltd., tiling.

Mr. Stanley Hamp, F.R.I.B.A. (Messrs. Collcutt and Hamp), is the architect.

Pair of Houses, Weston-super-Mare.

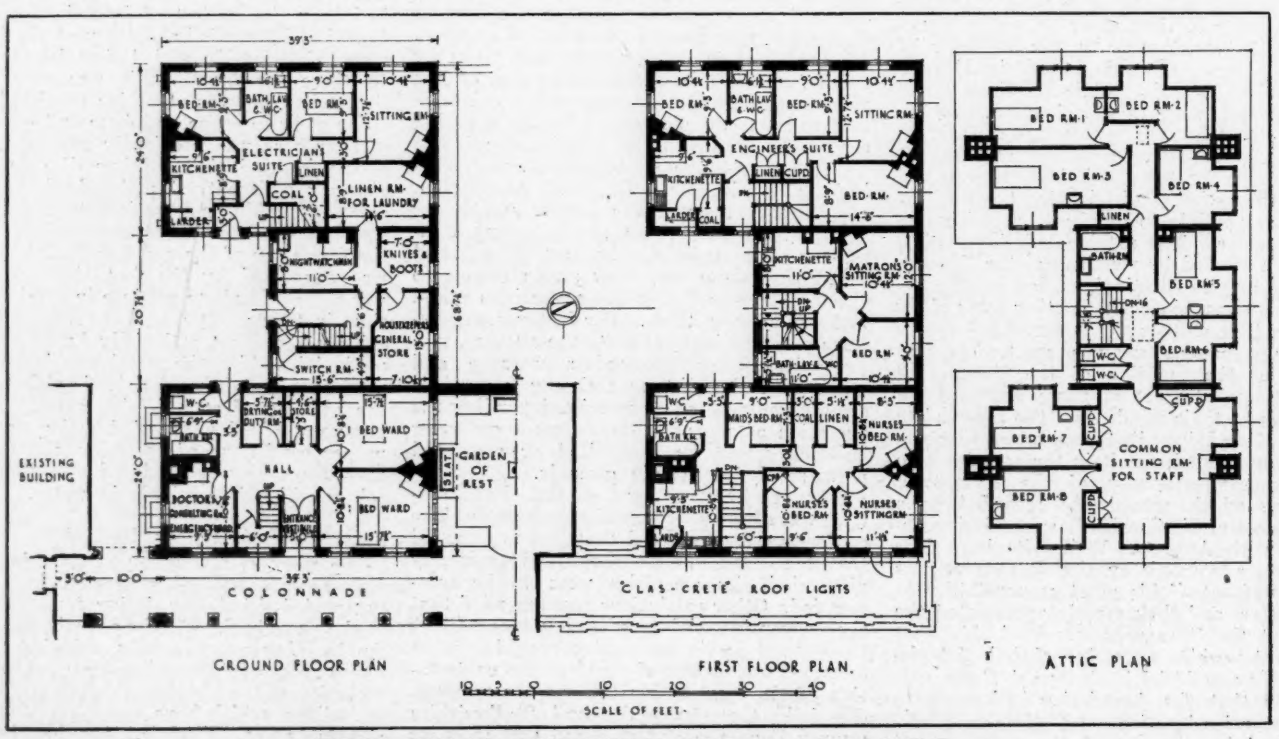
These houses (reproduced on page 603) are for the Weston-super-Mare Building Estates, Ltd., the contractor being Mr. Geo. Bartlett, of Weston-super-Mare. The walls are of cavity brickwork and cement roughcast outside, and Crittall's metal windows have been used, the roofs are covered with Board's "Weather-block" tiles, and "Ideal" boilers are being used for hot water supply to baths, lavatory basins and sinks. The ceilings of the reception rooms have the beams and floor joists exposed to view, the whole of the internal woodwork being carried out in Columbian pine, stained. The fireplaces are built up with small hand-made sand-faced bricks. The total cost of the pair of houses will be about £1,700.

The architects are Messrs. Ball and Pope, AA.R.I.B.A., of Weston-super-Mare.

FORTHCOMING R.I.B.A. EVENTS

The opening meeting of the R.I.B.A. session will be on Monday, November 6, at 8.30 p.m., when the inaugural address will be delivered by the President, Sir Giles Gilbert Scott, Hon. D.C.L., Hon. LL.D., R.A. At this meeting there will be unveiled the portrait of Sir Raymond Unwin, Past President, painted by Sir George Clausen, R.A.

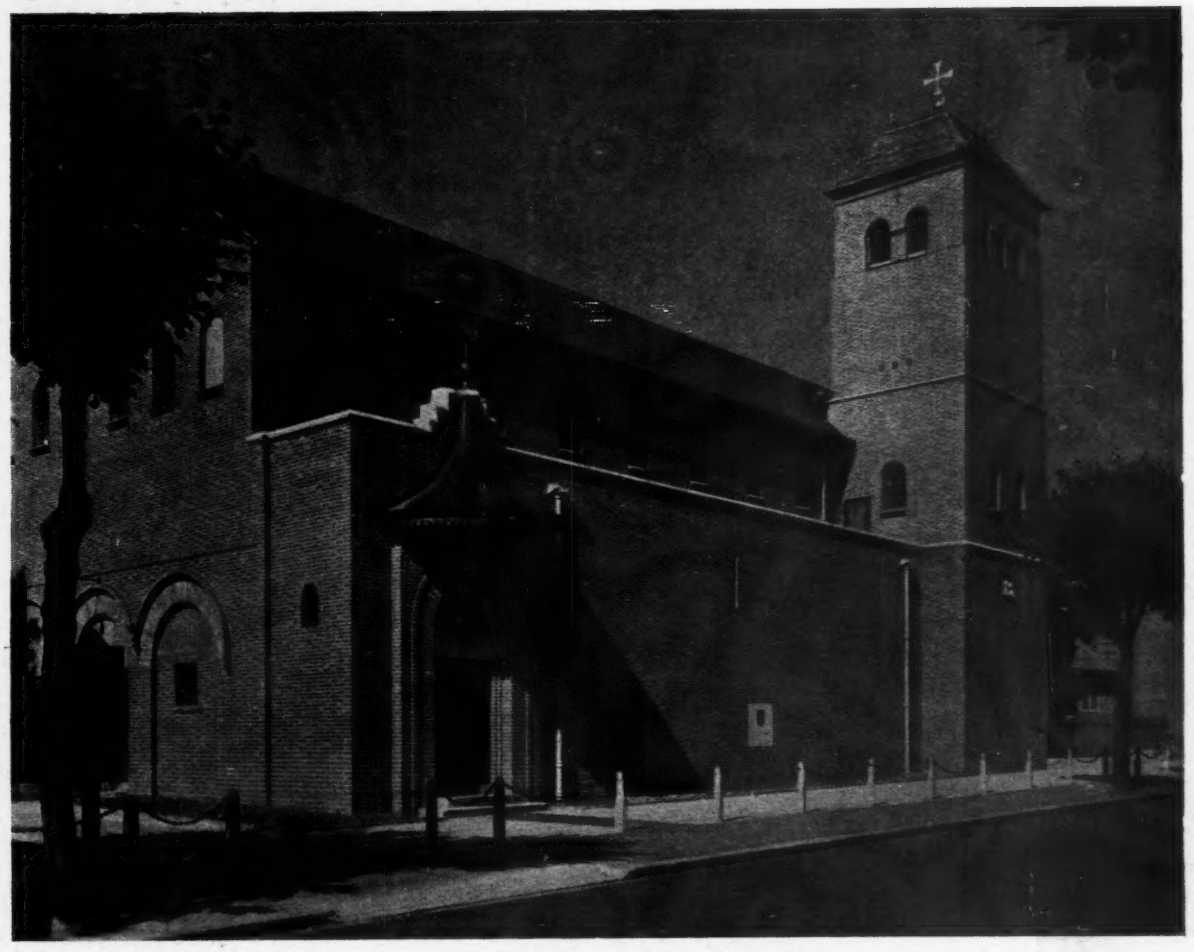
It has been suggested that three dances should be held at the Institute rooms during the coming winter session, and that the tickets for the three dances should be one guinea for the series, which would carry with it the privilege of bringing a guest. In order to discover whether such a proposition would meet with the support of the members, those who would be willing to take tickets for the series should write to Mrs. J. Alan Slater, 8, Wellgarth-road, N.W.11, before Monday, October 23, stating the number of tickets which they would require.



MORDEN COLLEGE, BLACKHEATH: New Hospital and Staff Quarters.

SIR BANISTER FLETCHER, P-P.R.I.B.A., F.S.A., Architect.

VIEW FROM NORTH-EAST.



VIEW FROM EAST.

CHURCH OF ST. CHAD, SOUTH NORWOOD.

MESSRS. LEONARD STOKES AND DRYSDALE, Architects.

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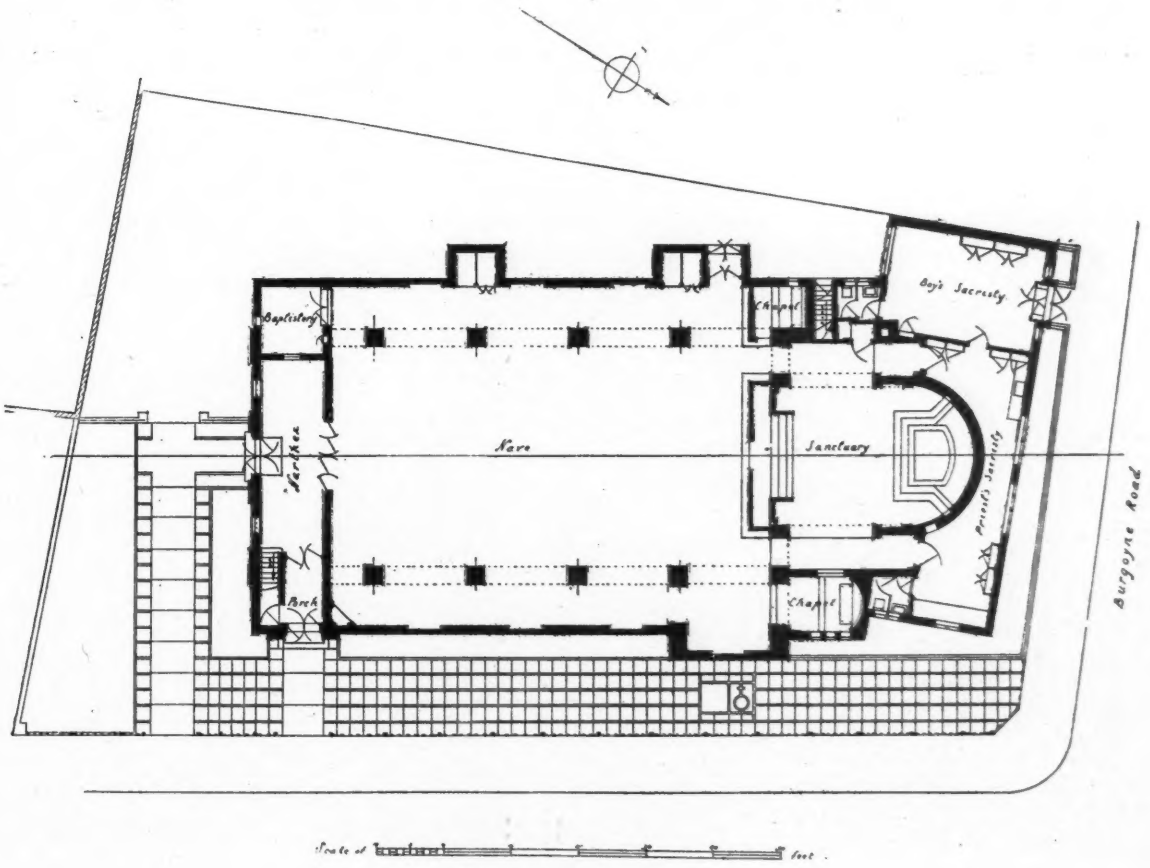
INTERIOR, LOOKING TOWARDS SANCTUARY



PLAN AT GROUND LEVEL.

CHURCH OF ST. CHAD, SOUTH NORWOOD.

MESSRS. LEONARD STOKES AND DRYSDALE, Architects.

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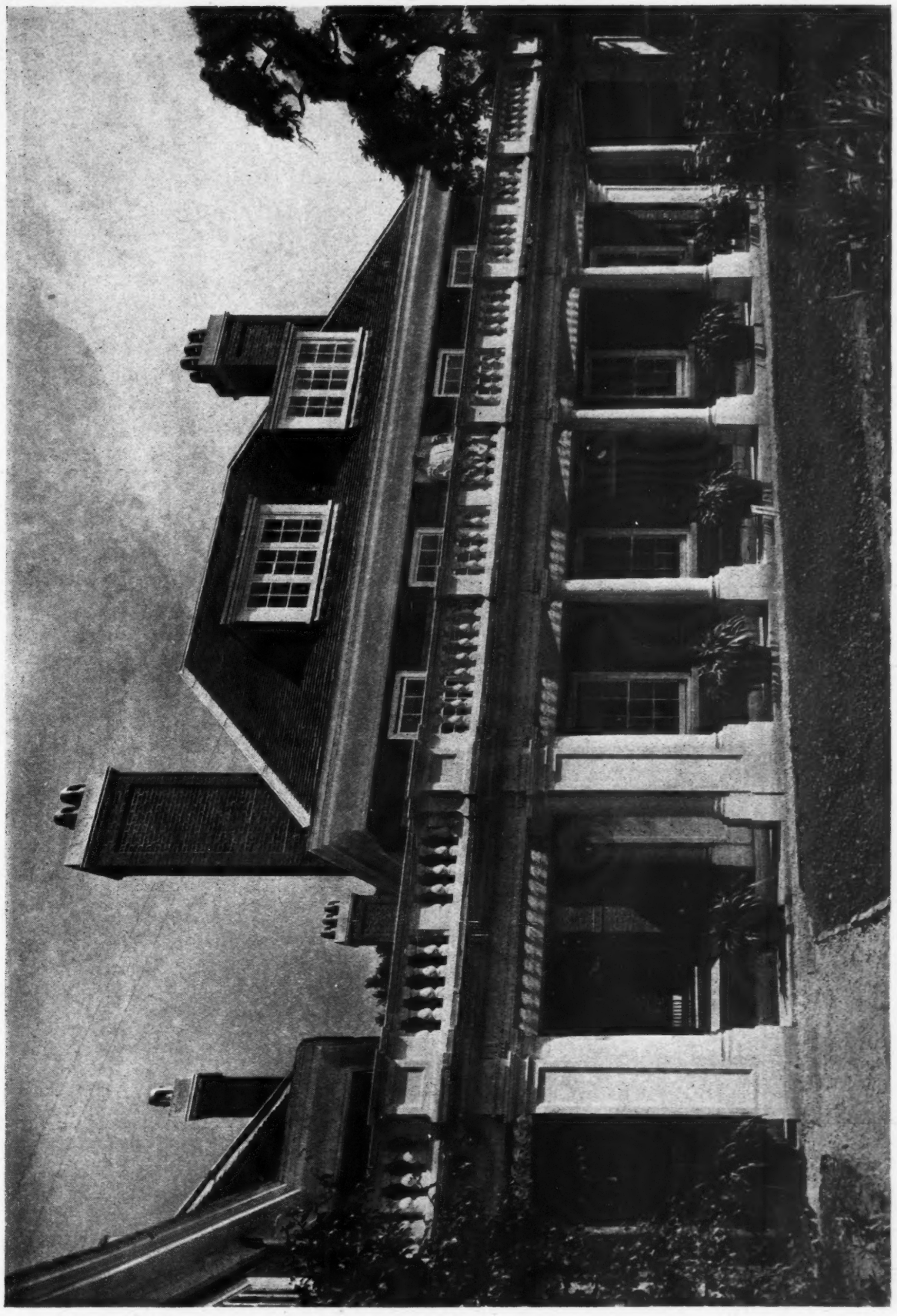

MORDEN COLLEGE, BLACKHEATH : New Hospital and Staff Quarters. View from North-West.

SIR BANISTER FLETCHER, P-P.R.I.B.A., F.S.A., Architect.

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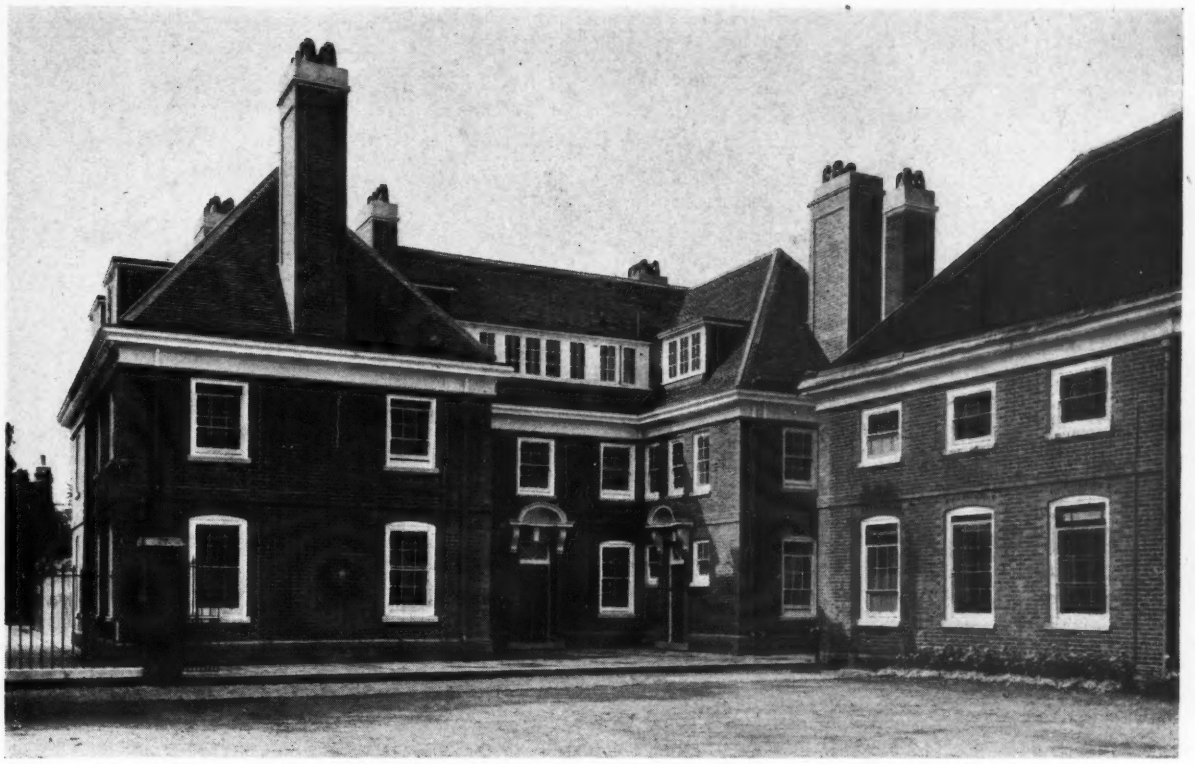

NORTH ELEVATION OF NEW BUILDING AND PART OF EAST FACADE OF ORIGINAL WORK.

EXTERIOR, FROM SOUTH-WEST.

MORDEN COLLEGE, BLACKHEATH : New Hospital and Staff Quarters.

SIR BANISTER FLETCHER, P-P.R.I.B.A., F.S.A., Architect.

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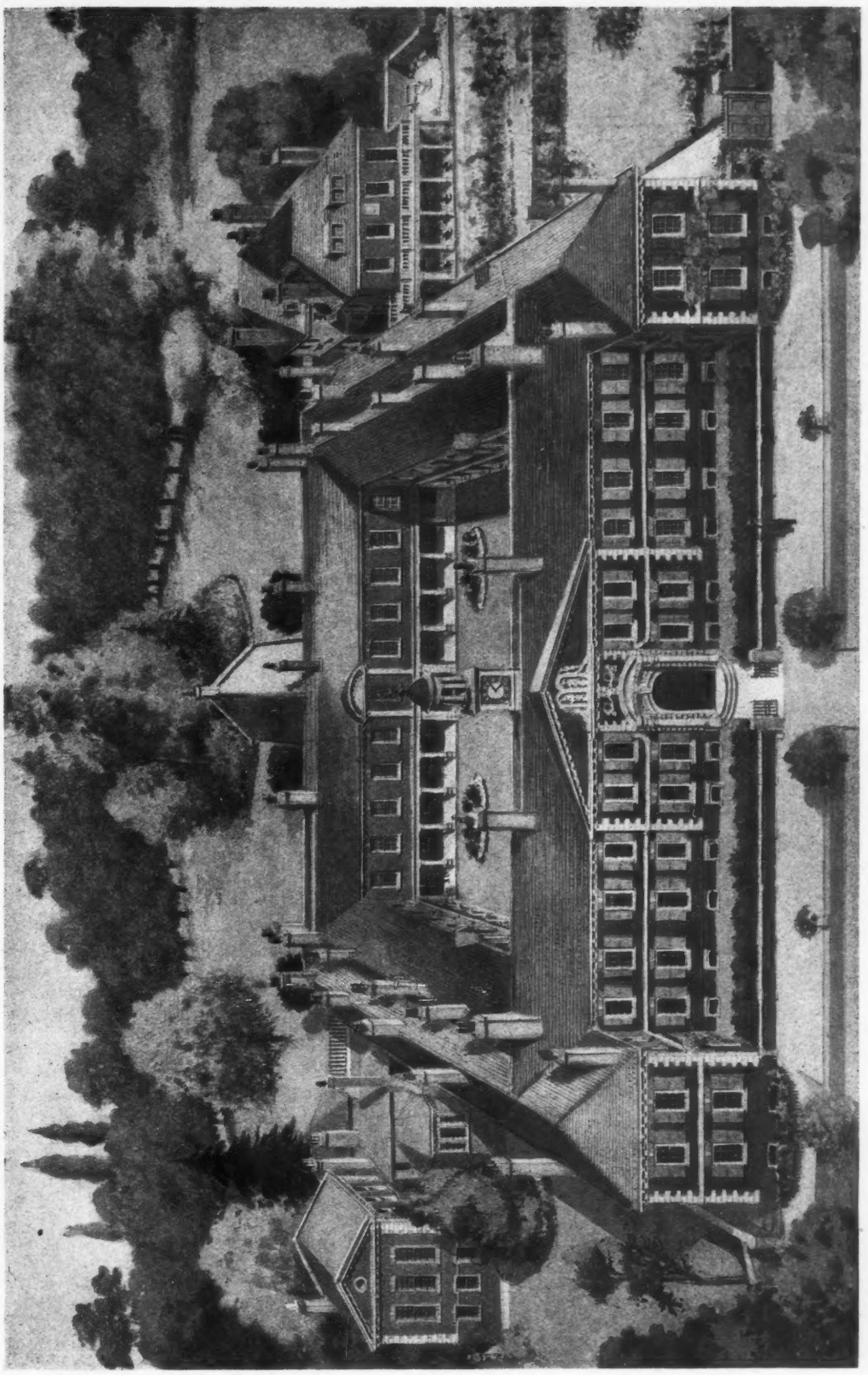
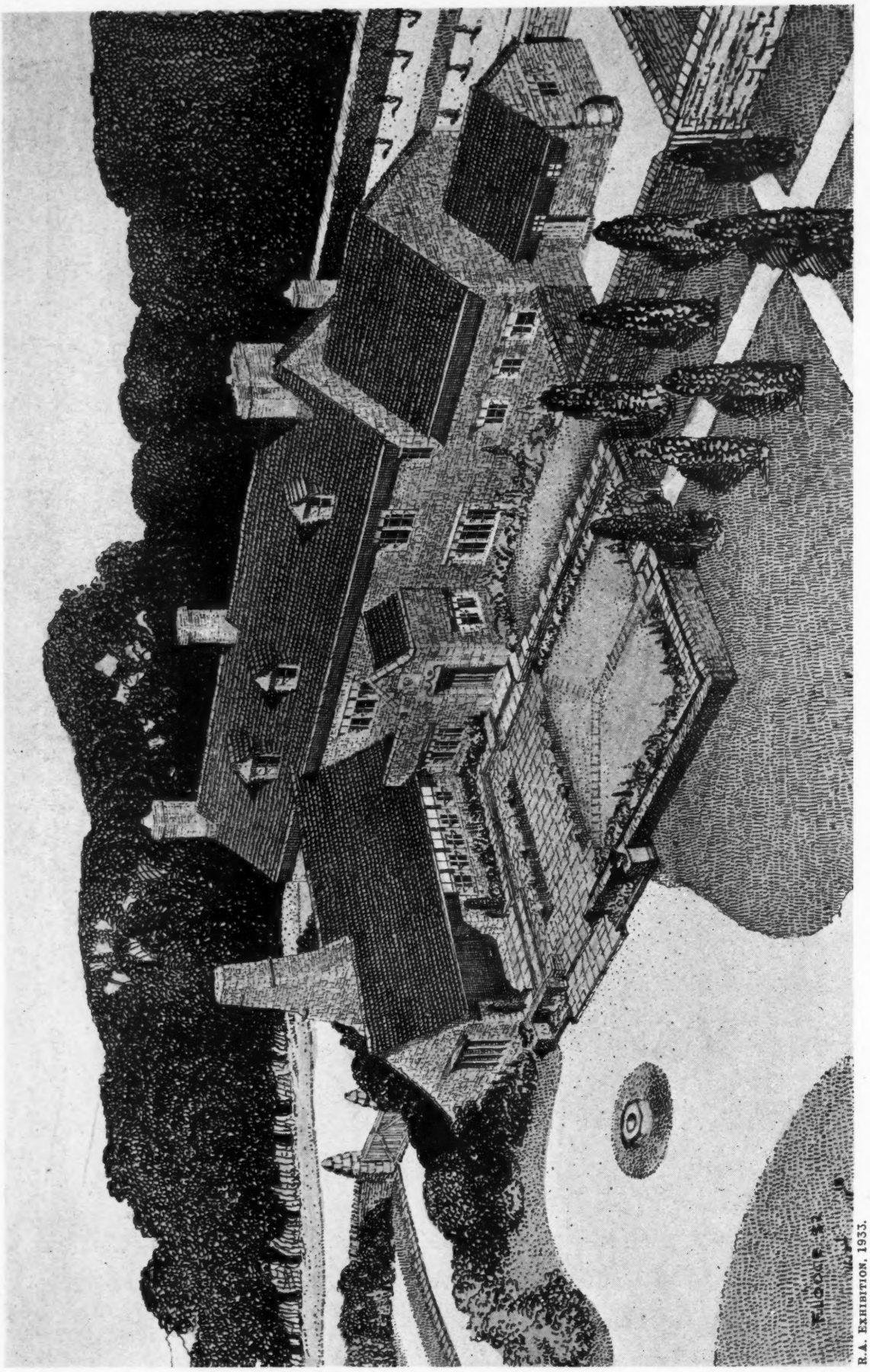


MORDEN COLLEGE, BLACKHEATH.

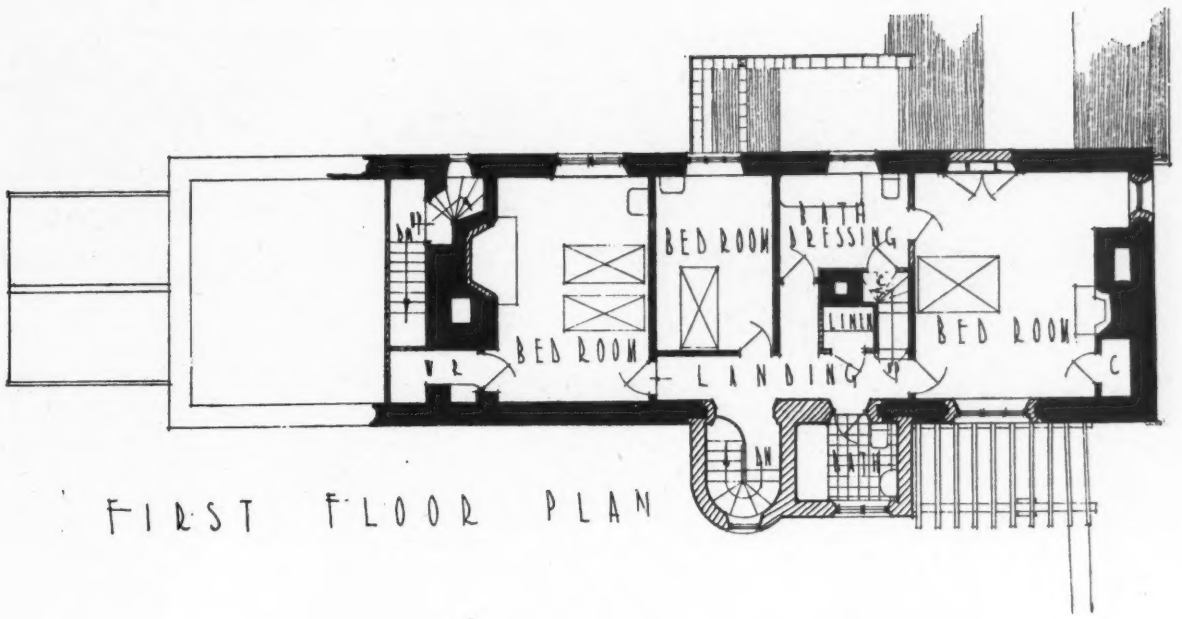
DESIGNED BY SIR CHRISTOPHER WREN (A.D. 1695). HOSPITAL AND STAFF QUARTERS ON RIGHT
ADDED FROM THE DESIGN OF SIR BANISTER FLETCHER, P.P.R.I.B.A., F.S.A.



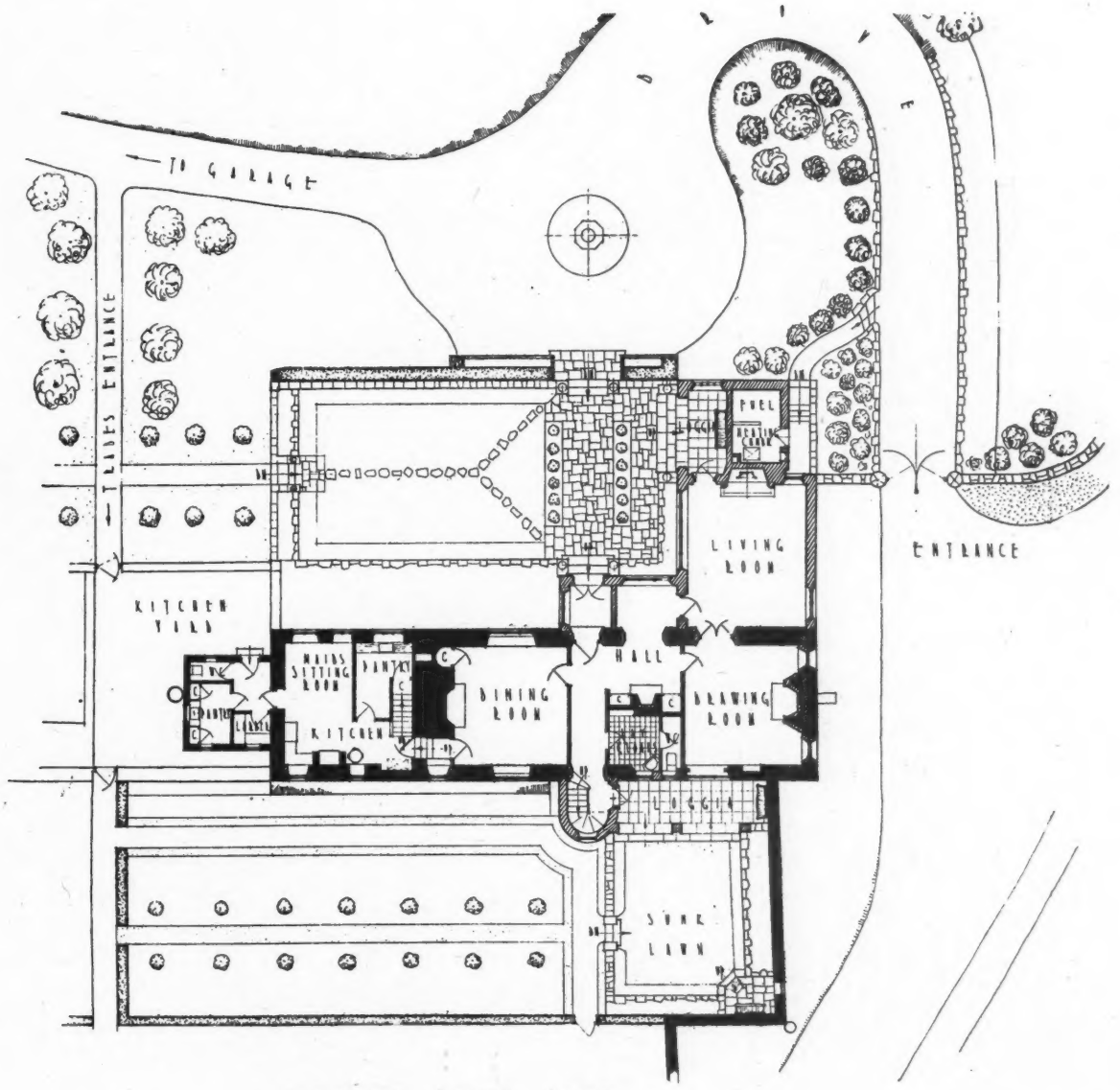
MANOR FARM HOUSE, HEADINGTON, OXFORD: Alterations and Additions.

MR. STANLEY HAMP, F.R.I.B.A. (Messrs. Collcutt and Hamp), Architect.

R.A. Exhibition, 1933.



FIRST FLOOR PLAN

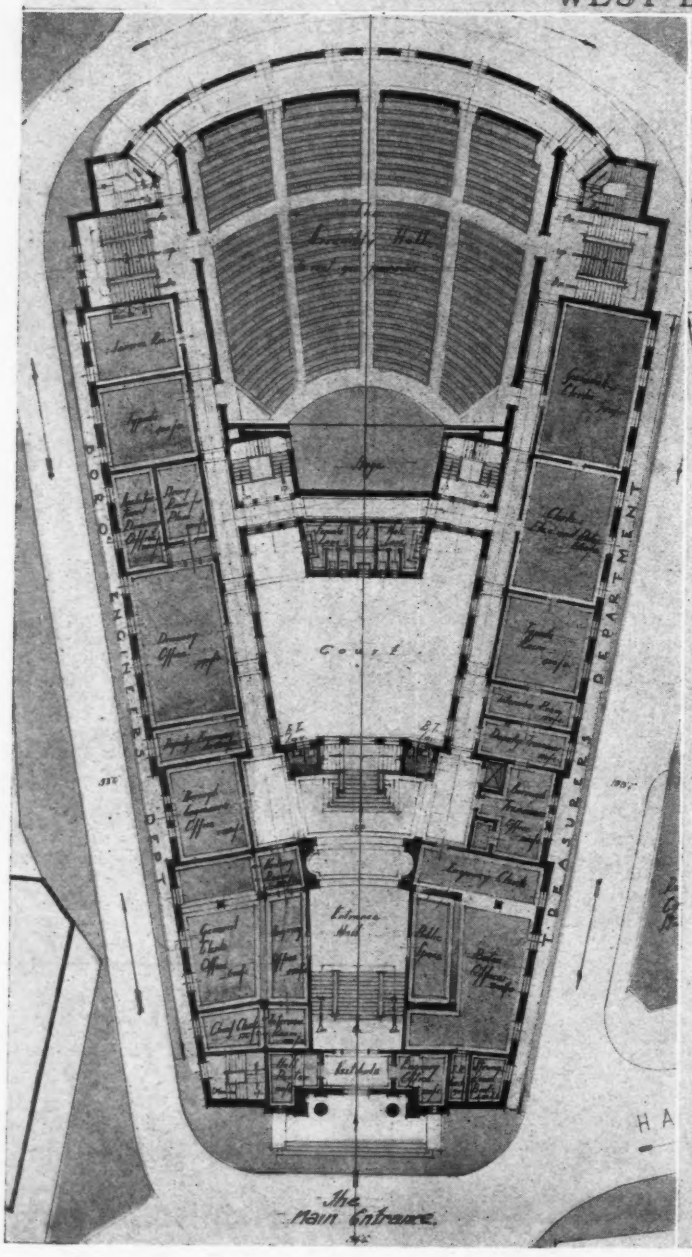


GROUND FLOOR PLAN

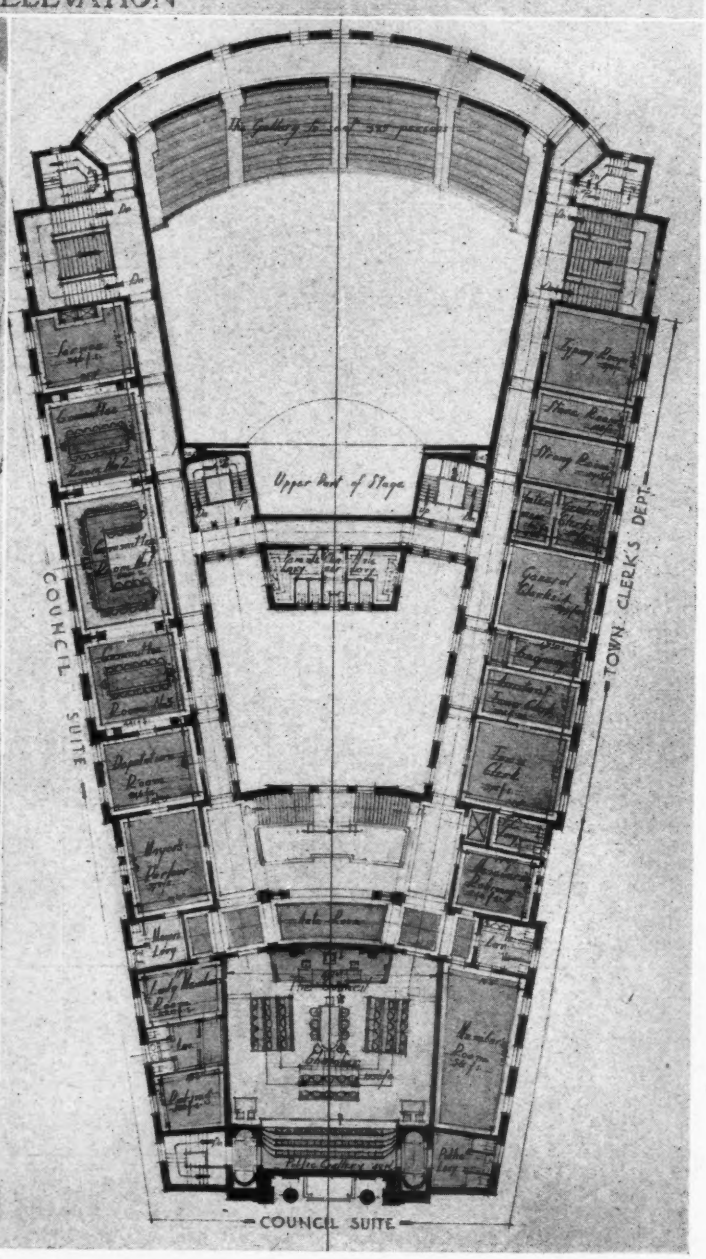
SCALE FEET

MANOR FARM HOUSE, HEADINGTON, OXFORD: Alterations and Additions.

MR. STANLEY HAMP, F.R.I.B.A. (Messrs. Collcutt and Hamp), Architect.



GROUND-FLOOR PLAN.



FIRST-FLOOR PLAN.

HORNSEY MUNICIPAL BUILDINGS COMPETITION.

DESIGN SUBMITTED BY MESSRS. LANCHESTER AND LODGE, FF.R.I.B.A.

RENT AND MORTGAGE INTEREST RESTRICTIONS (AMENDMENT) ACT, 1933.—II.

RESTRICTION ON RIGHT TO POSSESSION.

SECTION 3 of the Act contains two methods by which landlords can, on application to the Courts, obtain possession of houses which are still controlled under the Act. The Court in each instance must be satisfied that the landlord's claim is reasonable before making an order or giving judgment for possession.

First Method.

The First Schedule to the Act gives the following grounds, under any of which the Court may give the landlord possession without proof of alternative accommodation :—

(a) Unpaid rent or breach of an obligation of the tenancy.
(b) The tenant or any person residing or lodging with him or his sub-tenant having created a nuisance or annoyance to adjoining occupiers, or who has been convicted for immoral or illegal use of the premises.
(c) The tenant having prejudiced the landlord by giving notice to quit.
(d) The tenant assigning or subletting the whole of the premises.
(e) When the dwelling-house consists of or includes an off-licence and the conduct of the tenant thereof has endangered the renewal of the licence.
(f) Overcrowding which the tenant could reasonably have abated.
(g) The landlord requiring the premises for occupation by any of his whole-time employees.
(h) On the landlord who had purchased the premises before July 11, 1931, requiring them for occupation by himself, or by his son or daughter—who are over 18 years of age—or by his father or mother.

In all these instances the Court has a discretion as to whether the greater hardship will be suffered by the tenant or the landlord and relative.

Second Method.

The landlord can obtain possession if he can show the Court that suitable accommodation will be available when the order or judgment takes effect. A certificate of the Housing Authority concerned, stating that suitable alternative accommodation will be provided by them is conclusive evidence that such accommodation is available. But if no such certificate is forthcoming, then the alternative accommodation which the landlord must offer must fulfil one or other of the following conditions :—

(a) Another controlled house.
(b) The premises submitted must be a decontrolled house, let as a separate dwelling and with security of tenure similar as regards rent and accommodation to the house provided by the Housing Authority in the neighbourhood for persons whose needs as regards extent are, in the opinion of the Court, similar to those of the tenant and his family; and the premises must in other respects be reasonably suitable to the tenant's requirements.

The claim for possession can in this instance be supported by a certificate from the Housing Authority, giving the extent of the accommodation and rental therefor which they provide for a family similar to that of the tenants occupying the premises for which he, the landlord, is applying to the Court for an order for possession.

Prevention of Excessive Charges for Sublet Parts of Dwelling-houses.

If the landlord can prove that the tenant is charging rent for a part sublet in excess of the "Recoverable rent"—*i.e.*, the maximum rent which could be charged under the Rent Restriction, etc., Acts of 1920 and 1923—then it is in the discretion of the Court to give the landlord possession.

The Court has power in such proceedings to apportion the rent (if no apportionment has hitherto been made) of the standard rent between the dwelling-house and the sublet part thereof, and this whether an order for possession is made or not. A tenant convicted of wilfully charging more than the amount so apportioned in respect of the subtenancy is liable under the Act to a serious penalty.

Particulars of Subletting to be Given to Landlord.

A tenant who had sublet part of a controlled house before the passing of the Act, *viz.*, July 18, 1933, had, before October 18, 1933, to supply his landlord with particulars of the subletting and its rent. Should he sublet after the passing of the Act, he must do this within fourteen days of the subletting. Failure to do so incurs penalties; but where a subletting is merely a repetition and on identical terms with a previous subletting, no further notification is required.

Dwelling-houses of Three Shillings per Week Rental.

Under Section 5 of the Act, if the recoverable rent of a dwelling-house (not being a sublet part of another dwelling-house) is not more than three shillings per week, and the landlord has had possession of it at any time since the passing of the Act, he can obtain possession of it again, but cannot increase the rent to a new tenant.

Division of Premises into Sub-tenancies.

It is common knowledge that single dwelling-houses have, since the war, been divided into a series of dwelling-houses. Either the landlord has done this or the tenant. Where a controlled tenant has made the division, the sub-tenancies are each still controlled; so are such divided portions of a house which were so divided by the landlord before July 31, 1923. A landlord who divides premises into many tenancies still retains control of the premises as a whole, *i.e.*, of all the tenancies; but if he lets the whole of the premises to one tenant, and that tenant divides the premises into many sub-tenancies, the landlord does not retain control of the premises, *i.e.*, of the sub-tenancies, as a whole. The landlord's contract of tenancy is with the head tenant only.

[We regret an error in the article which appeared on page 584 of our last issue. The last paragraph under the heading of "Dwelling-houses Decontrolled" should read as follows :—

It should be noted that a dwelling-house, in order to be included in Class A, must be such that *either* the rent *or* the rateable value of it must each and severally exceed the amounts stated above.—ED.]

BUILDING CONSTRUCTION OF THE FUTURE

By G. MAXWELL AYLWIN, F.R.I.B.A.

[*Concluded from page* 548, *October* 6.]

III.—ROOFING.

ROOFING has been a determining factor in the form of buildings, and whole styles have grown up as the result of developing a roofing system; as, for example, the Byzantine and Gothic styles. It is not surprising, then, that the roof should have such a marked effect upon the style of a building, and in none more so than in the design of small houses. That it can have a marked effect upon the system of planning is a fact which need call for small surprise.

The small compact unit in which a number of compartments are grouped around a central distributing hall and landing is theoretically most economically contrived in the bounds of a square, other things being equal. With a flat roof there is little restricting influence against satisfying this ideal measure of economy. With a sloping roof there is a distinct influence towards an oblong, "L"-shaped, "H"-shaped, or "E"-shaped plan, in order to provide relatively short spans of roofing easily intersected where required. The sloping roof over a square plan is inconsistent with direct economic methods, involving, as it does, either a lofty and wasteful roof or a series of spans with gutters between, both costly and unsound in constructive method. Thus we find at once a theoretical influence in favour of the flat roof and its freedom as an influence upon the plan.

If we add to this a future committed to concrete as an effective building material, there are very strong grounds for developing architectural design upon the basis of the flat roof, with cubic elements. It would not be going too far to say that, if we can convince ourselves that concrete construction will develop upon the lines that will provide flat roofing systems and weather coverings that are cheap, efficient, and easily constructed by the ordinary country builder, as he may be expected to develop, then the case for the flat roof would be complete.

With the small building in the country, however, the evidence in favour of the flat roof is not complete. It is a most significant fact that upon many estates the only restrictions upon buildings to be erected by purchasers is that the roof shall be tiled. Whether an intelligent restriction or otherwise, it at least expresses the importance of the roof upon the harmony of an estate, and the designer who has reached the conclusion that the roof of the future is to be flat must realise he has many ramifications to break through before he can carry his point. And before he attacks them without compromise he is wise to explore the ground to find out how far these ramifications are built up out of prejudice and how far out of building sense.

The question of expense may be considered first, and it may be shown at once that by direct comparison between covering costs the flat concrete roof with bituminous finish is cheaper than a properly constructed roof with a tile finish of equal quality. To reduce the comparison, however, it may be taken that the copings of parapets and flashings and skirtings to flats as compared with the eaves guttering of the sloping roof count in favour of the latter.

On the other hand, it may be reasonably argued that with a more general and intelligent use of concrete, the economies might be expected to develop definitely in favour of the flat roof.

There are still other considerations that must be taken in a comparison of price. In certain cases outside walling can be saved by making use of the roof space down to a certain height, above which the ceilings of rooms may be allowed to slope without loss of convenience. This may sometimes be a substantial economy not possible with the flat roof.

Diverging from the direct comparison, we come to another consideration, *viz.*: the roofing of a two-storied house where the upper floor area required is less than that required on the first floor. That is a common condition with the small modern house, particularly where an attached garage is provided.

The construction of a reducing cube of this nature introduces certain minor problems in flat-roofed construction. The falling away on the upper stories demands certain flat roofs over the ground floor, which frequently offer suitable balcony spaces at bedroom level. The necessity for weatherproof walling, flat roofing and parapets is, however, present, with a source of possible weakness where the flat joins the vertical wall. In the case of a sloping roof it is frequently possible to float the main roof down over the greater ground-floor area with a minimum of expense and structural complication.

The covering of a sloping roof also carries with it a certain advantage in method and ease of repair. The clay tile, like the clay brick, is available in most districts, and, if marketed with the same efficient organisation now applied to the cement industry, would hold the field under most conditions as cheap and efficient material. Defects declare them-

selves immediately, are easily traced, and as easily mended by men of the most elementary skill.

The principal objections seem to be the timber substructure this form of roof demands, and this may again become less of an objection if the scientific treatment of timber develops along fireproof and rot-proof lines.

Again, the roof space is frequently used to house supply tanks, pipe and cable runs, etc., where they remain accessible for attention and repair. With the flat roof, tanks must be provided with an outside weather-proof enclosure, and pipes and cables must be exposed inside the rooms unless a double flat is formed, with double expense, or the runs buried permanently in the concrete, beyond all access for repair.

These considerations of the practical problem in building construction suggest that the case for a drastic revision of method is not so complete as is generally assumed; and that the modern house may assume a natural shape and form which differs little in character from what has gone before. This need not alarm the stylist of any school, because style will always arrive unless we artificially check its natural growth. The important thing is to preserve a well-balanced and receptive mind, ready to accept any real advance, and to reject any affectation which is not related to the real problem of the job.

PRIVATE STREET WORKS: APPEALS TO MINISTER

We recently noted some of the appeals to the Minister of Health in connection with the making-up of streets both under the Public Health Act, 1875, and the Private Street Works Act, 1892, as detailed in the Report for the Ministry for 1931-32, but a few appeals remain to be noticed in the Report for the current year.

Appeals Under the Public Health Act.

In the Report for 1930-31 a case was mentioned where a local authority, acting under section 150 of the Public Health Act, on default by the frontagers to carry out the work on certain private streets (this default being usual in practice), had employed direct labour to execute the works and had included in the sums apportioned upon the frontagers certain items in respect of the use of tools, plant, handling charges, and National Insurance, expressed as a percentage. Subject to a small disallowance in respect of a proved over-estimate of the appropriate proportion allocatable to the works, the Minister allowed these charges, but pointed out the allocation must be based on careful costing.

In the current report the matter is carried a little further by reference to a case where the works were being carried out by contract. The local authority had employed a clerk of the works and a private street works assistant, solely for the purpose of supervising the works, which included a number of private streets, and the sum apportioned on the frontagers included a proportion of the remuneration of these officials. The Minister allowed the charge, holding that the expenditure was actually incurred, and that the supervision of the contract work was a reasonable provision to make, and that the cost of it might be regarded as part of the expenses incurred in executing the works within the meaning of section 150, but he added that the test, whether the work is executed by direct labour or by contract, was whether the expenditure has specifically been incurred for the particular work, and whether the supervision was necessary and the charge reasonable; but authority was clearly against the inclusion of expenses of supervision where that supervision is carried out by the ordinary staff, and frontagers should not be charged with expenditure which would have to be incurred by the authority even if the frontagers themselves executed the works; for instance, the cost of the preparation and issue of notices and the preparation of plans and sections.

As regards sewering, a case is reported where the local authority, under section 150 of the Public Health Act, in the case of a street, half of which had already been sewered, sewered the other half and apportioned the cost over the entire frontage of the street. On appeal by the frontagers on the half already sewered the Minister allowed the appeal, holding that the proper course was to deal with the street as two separate streets.

The only other case reported under the Public Health Act was one in which the local authority had included in the specification the planting of trees, and apportioned the cost upon the frontagers. The Minister held that this was not authorised by section 150, nor by any special powers obtained by the Council.

Cases Under the Private Street Works Act.

Two cases are reported in which the appeals raised the question whether such special circumstances existed as to justify the Minister in varying an apportionment on frontage alone and to have regard to the degree of benefit derived by the premises from the works. We have explained in our recent article how such questions arise. In the first case, through an open field, bounded on one side by the boundary wall of a park property used as an institution, there ran a footpath a few feet from the wall and more or less parallel to it. A developer acquired the field, enlarged the footpath into a rough track 12 ft. wide, and built houses along the western frontage. Subsequently the developer invited the Council to make up the road, giving additional land, making in all 60 ft. for the road. The Council made up the road with a carriageway of 24 ft. and 6 ft. footways on each side, turfing the remainder. To the street as thus made up, the owners of the park property were frontagers over its eastward length for 660 ft., and they were apportioned with the cost according to frontage. These owners appealed, and the Minister, before giving his decision, made some general observations which are instructive. He pointed out that where there are no exceptional circumstances it is undesirable to question the decision of a council to apportion according to frontage as in normal circumstances under that practice purchasers of properties are better able to estimate what the liability in respect of private street works is likely to be, and to have this in mind in considering the price they are prepared to pay: and the only issue he had to determine in this appeal was whether in the exceptional circumstances of this case an apportionment on a strict basis of frontage was inequitable as distinct from an apportionment according to the greater or less degree of benefit to be derived from the work. The exceptional circumstances appear to have been that the appellants had purchased the property many years before there was anything but the footpath, and the road, at the request of the owner of the land, had been made up to a width of 60 ft., the owner of the land on which it was formed having given the additional land as a gift, and if the degree of benefit was considered, the appellants had derived no benefit from the road, and therefore were entitled to be relieved of the entire charge.

In the second case, a street in a cutting at the rear of the appellants' premises had been made up by the Council. This street had been planned before the appellants bought their properties, and they were aware that it would be laid out, and the Minister declined to vary an apportionment on frontage.

Other Cases.

The above are the only actual appeals reported in the current report, but attention is called to a matter which was arranged without formal appeal. The frontagers on a private street had complained to their Council that the street was in an impassable condition, and urgently required making up, and the Council had prepared the necessary plans and specifications and served the statutory notices under the Private Street Works Act on the frontagers. The frontagers took certain objections under Section 7 of the Act, and the Council then insisted on the withdrawal of the objections, declaring that in the alternative they would leave the road unmade. The report points out the impropriety of this course, stating that it is clear that a local authority is not entitled to proceed with works and recover from the frontagers under the Act without disposing of objections, and scarcely less apparent that it is improper to defeat the right of the frontager to have his objection determined in accordance with Section 8 of the Act (that is, by a court of summary jurisdiction), by declining to proceed with works the urgency of which it has virtually admitted.

Only two points further require notice. At page 166 of the current report is a revised specification for street works, in normal circumstances and under urban conditions, which takes the place of that printed at page 171 in the report for 1924-25.

In the report for 1930-31, a suggestion was made in connection with small urban districts and rural districts, where building is not carried out according to a regular plan and the houses front upon little more than rough tracks, and owing to development being immature and the houses of low rateable value complete making up at the frontagers' expense is impracticable, that although the local authorities have no power under the general law to secure suitable access being provided, the difficulty might be overcome by making up a strip of carriageway with or without a footway of sufficiently permanent character to be incorporated later in the making up of the street. The current report notes that this practice has recently been adopted by a County Council acting in rural districts as the Authority under the Private Street Works Act.

NEW PUBLIC WORKS

Belfast.

The Baths Committee of the Corporation have approved the Peter's Hill baths extension scheme, to cost £45,000, and rejected a more elaborate scheme for the reconstruction of the baths at £60,000. Mr. R. M. Henry has been appointed the architect.

Birmingham.

It is proposed that the City Council shall erect libraries at Yardley Wood and South Yardley, at a cost of £13,750 each.

Great Britain.

H.M.O.W. are inviting tenders for the erection of various works, as follow:—Telephone Repeater Station, Whitchurch, Salop (November 6); Postal Engineering Garage and Stores, Eastbourne (November 6); the "Hurstway" Telephone Exchange, Hayes, Kent (November 7); Post Office, Ellesmere Port (November 9). In brackets are the dates upon which tenders should be returned.

Hendon.

The E.C. are now inviting tenders for the erection of a semi-permanent school, to accommodate 400 scholars, and a caretaker's bungalow, at Hale-drive, Mill Hill, N.W.7. Plans are by Mr. A. O. Knight, M.Inst.C.E., Borough Engineer. Mr. E. E. Richardson, F.S.I., 35, John-street, W.C.1, is quantity surveyor. Applications for bills of quantities must be made by October 31.

Islington.

The B.C. is to rebuild premises at the rear of 6-12, Canonbury-road, N.1, as an electricity sub-station. Plans have been drawn up by Mr. E. C. P. Monson, F.R.I.B.A., Finsbury Pavement House, Moorgate, E.C.2, and quantities are by Mr. Frank N. Falkner, 14, Princes-street, Cavendish-square, W.1. Tenders, now being invited, must be returned by November 1.

Swansea.

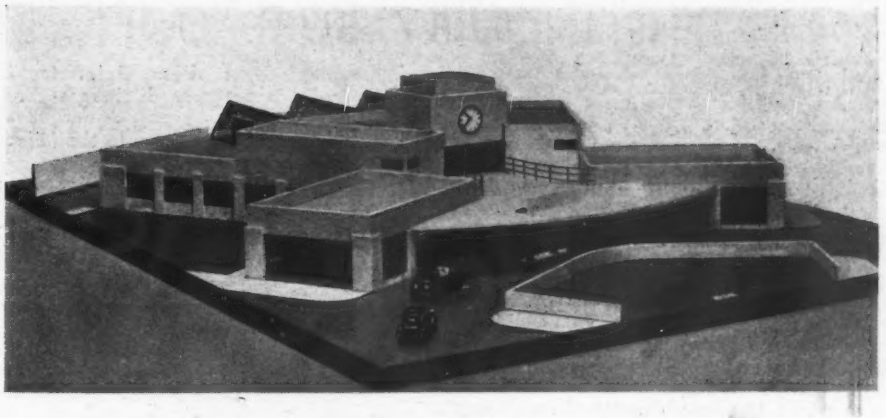
The Board of Management of the Swansea General and Eye Hospital have decided to carry on with the building of a new radiological Department and additional accommodation for 37 beds at a cost of £15,000 at the present hospital. Plans will be prepared by Mr. Glendinning Moxham, F.R.I.B.A., Swansea.

BOOK REVIEW

The Complete Law of Town and Country Planning, being a companion volume to *The Complete Law of Housing*. By H. A. HILL, B.A., of Gray's Inn, Barrister-at-Law. London: Butterworth & Co.; Shaw & Sons, Ltd. Price, 30s. net.

The Town and Country Planning Act, 1932, marking as it does a new departure, as well as consolidating the law and repealing of the Act of 1925, is a measure of considerable complexity, and those having to work it will welcome this comprehensive textbook. The Act consists of fifty-five sections and six schedules, the sixth schedule containing the modifications introduced in the Act in its application to Scotland, but the necessity of studying these modifications in detail as set out in that schedule has been obviated by their incorporation in an Act separately printed, and both the texts of the principal Act and that applying to Scotland are set out in this volume.

The introduction, which is divided into four chapters, in the first chapter contains a brief summary of the Act, taking the sections in numerical order; the second chapter contains some suggestive general observations on the Acts. The author's view is that section 6 (2) would seem to make a comprehensive scheme in relation to all land within the district of a local authority legally impossible in the majority of cases, and instead of one principal scheme, to be supplemented from time to time as circumstances might require, the author considers it will be necessary to prepare a series of schemes, or alternatively one scheme in relation to a number of scattered areas. Sir Leslie Scott, in his introduction to another work we have recently noticed, we think took a wider view, but as regards his argument as to the interpretation to be placed upon the Act itself, we ventured to take some exception. although much was to be said for another ground he put forward that land which was capable of being considered static was rapidly vanishing. Both writers, however, point out the advantages which may be derived from owner's schemes under the proviso to section 6 (2). The third chapter is by Mr. Ernest C. King, Solicitor Clerk to the Coulsdon and Purley Urban District Council, who speaks with practical experience, though if the view he expresses is correct, that the expenses of widening existing highways reparable by the inhabitants at large can, and ought to be, thrown upon the owners of land abutting upon the highway, this appears to us a hardship requiring the attention of the legislature. The fourth chapter is by Mr. William Loftus Hare, Editor of "Town and Country Planning," and deals with garden cities.



MODEL OF DESIGN FOR MOTOR TRADING PREMISES.

Passing from the introduction, which is an important feature of this work, we may state that the text of the Act is given in full and profusely annotated, whilst in the appendices will be found the Town Planning Act, 1925, to which reference may be necessary in the case of schemes still in course of consideration, and other Acts and Regulations, making the volume a complete work of reference, whilst attention may be drawn to two other features—the inclusion in Appendix D of the decisions of the Minister of Health with respect to interim development in a summarised form with cross references; and in Appendix G, a case, Frances *v.* Mayor of Ealing, which the author states appears not to have been reported elsewhere, decided under section 1 of the Town Planning Act, 1925, which turned upon the question whether land to some extent already built upon could be included in a scheme.

There is a Table of Cases and Table of Statutes and an index.

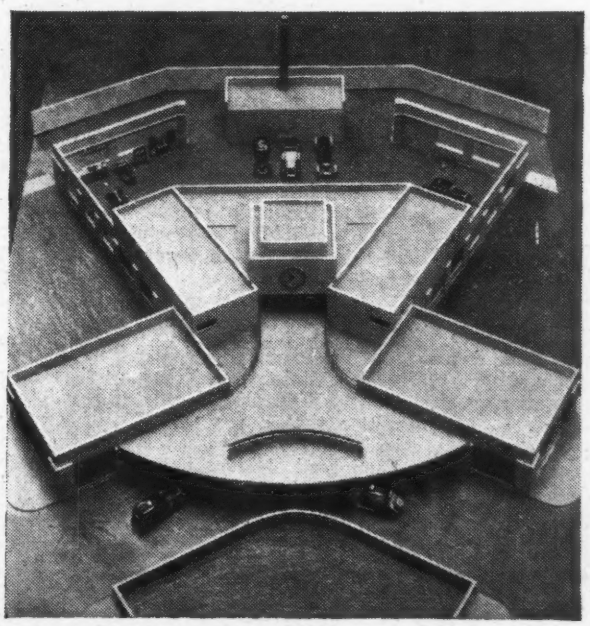
MOTOR TRADING PREMISES

AN interesting exhibit on view at the Motor Exhibition at Olympia is a model of motor trading premises designed to be erected on the unit system, so that though a trader commence with the minimum buildings for his immediate use, he can, as the business grows, add showrooms, workshop, more garage space, and so on, in a manner which will harmonise with the parent building. The intention is that at no stage will a building be unbalanced or look unfinished. Temporary roofs are easily arranged and more easily removed. Expansion can be vertical or horizontal. Above all, the system is intended to make for economy. A side wall can be extended by one window section, or a whole block raised a story.

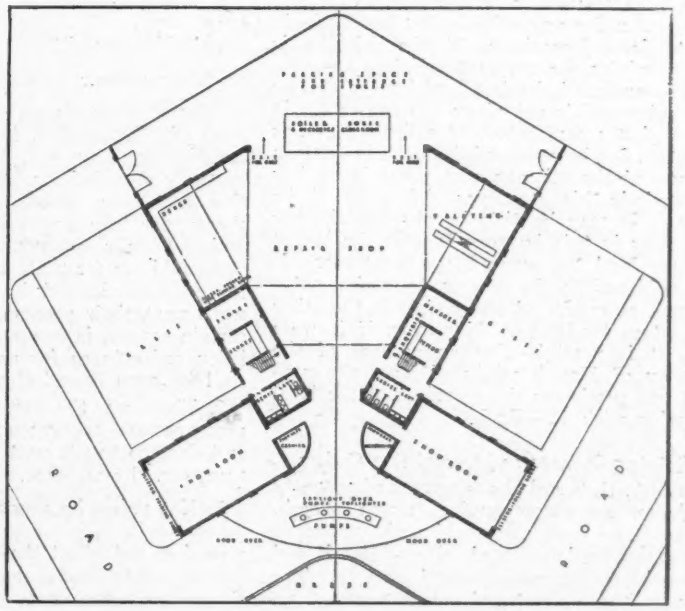
In the model in question, a difficult site was purposely chosen, the argument being that if this sharp corner lent itself to unit buildings the principle would apply in every case. From whichever road the motorist approaches he sees part of the building full face. There are no faces in perspective, and judicious use of Neon or other signs carries its message to the four points of the compass. Additionally, perfect freedom of exit and entrance are provided front and rear, from side to side, or from back to front. The grass can be laid out as ornamental gardens or as tea gardens. It is suggested that the building be carried out in reinforced concrete with concrete floors suitably treated to prevent dust and oil saturation.

In this layout there are four petrol pumps, oil fountains and air and water posts, arranged under a floodlit canopy. The main central entrance under the canopy gives access to the main garage, repair shops and service station, as is shown on plan. A staircase in the right-hand block affords access to the canopy and the tower. Being flat, the roofs of the two blocks can be used for many purposes, according to the policy of the proprietor. Sunbathing or a swimming pool, a tea garden or a badminton court can be arranged at little extra cost. There is garaging space for a large number of cars and commercial vehicles, but this is automatically increased as the walls of the repair shop extend rearwards.

The design of the building is by Mr. G. Alan Fortescue, F.R.I.B.A., who is acting as architect to Builders (New Ideas), Ltd., and the model, with its cars and equipment, is by the Models Manufacturing Co. The model is on view at Stand No. 152, that of the *Motor Trader* journal.



MODEL OF DESIGN FOR MOTOR TRADING PREMISES.



PLAN. MR. G. ALAN FORTESCUE, F.R.I.B.A., Architect.

THE INQUIRY BUREAU

We are glad to give questions and answers, but cannot accept responsibility for contributed replies, especially on legal matters.

We do not undertake to reply to inquiries concerning proprietary materials.—ED.

QUESTIONS.

Municipal Building Inspector.

SIR,—I shall be grateful for a brief summary from an experienced reader of the usual duties of a municipal building inspector.

IDEALIST.

Mushroom Houses.

SIR,—I should be glad of advice as to the construction of forcing houses for mushroom growing, and to know whether there is any text-book on the subject.

PLANNER.

Insulating Tiles.

SIR.—I should be glad to be put in touch with any firm which supplies and lays insulating tiles suitable for laying on asphalt or bituminous felt roofs. TEMPO.

Special Valves.

SIR,—I understand there are special valves for draw-off taps, whereby a certain quantity of water can only be drawn off at a time, after which the valve has to be reclosed and reopened, the object being to limit waste, particularly for hot-water systems. Can you put me in touch with the makers of such a fitting? ANTI-WASTE.

Flues and Short Chimneys.

SIR,—We recently built a bungalow, installing an ordinary fire-range, but using 6 in. asbestos flue pipe. The ridge of the roof is 15 ft. above floor level and chimney was taken about 18 in. above this. It smoked very badly, and we were persuaded to change to 8 in. pipe with no better results. We then built a 9 in. by 9 in. brick flue, but it still smokes. We understand that this is a common difficulty with short chimneys. Can you or any of your readers give us any advice? We have, of course, made sure there are no leaks, bends or corners, etc. R. D. & Co.

Mistake in Accepted Tender.

SIR,—A local authority invited tenders for the erection of some houses, and the lowest tender was accepted. After the work had commenced the contractor informed the council that he had underestimated for the work. The Finance Committee were of the opinion that a genuine mistake had been made and recommended that some payment should be made to the builder. Is this possible, or is the contract binding? X.

[Once the tender of a contractor is accepted, he is usually held bound by it and must suffer for any mistake he has made in his tender. Sometimes, if the mistake is discovered by the contractor before the contract is executed, he is allowed to withdraw his tender and is not given the contract. It is rare that a contractor, once the contract is executed, is given any additional payment on account of the mistake, but there is no law to preclude his employer doing so if he wishes. It may be that by the mistake the contractor in this instance became the lowest tenderer and so secured the contract. It is considered to be wrong to make extra payment as suggested and unfair to the other contractors tendering. Moreover, if it were done, it is possible that an auditor of the Ministry of Health might discover the payment and surcharge the members of the local authority with it.—ED.]

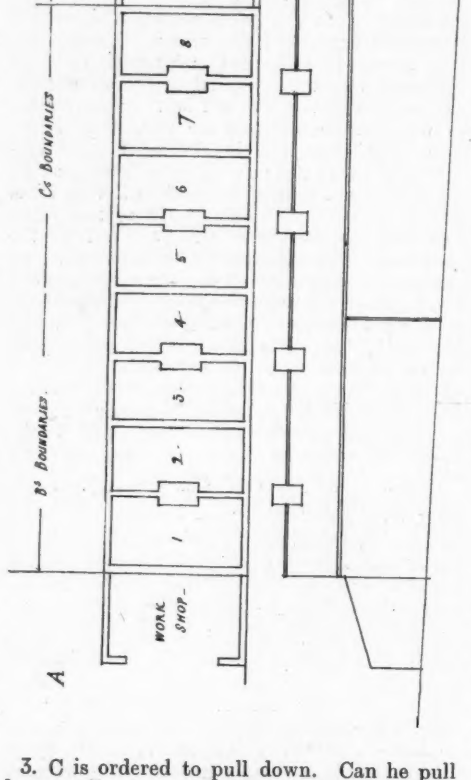
Adjoining Owners and Demolition Orders.

SIR,—A, B, C and D are owners of property as shown on accompanying rough sketch. There are no deeds from which the questions arising can be determined. Properties B and C are older than properties A and D. The party wall between B and C is not carried up to the underside of the slating, the purlins being supported on piers. Rainwater from the roof of C's property discharges through R.W.P. on B's front.

I should be glad of answers to the following questions :—

1. B is served with a demolition order. What duties does he owe to A and/or C?

2. B is not served with an order, but wishes to pull down. To what extent are his duties to A and/or C varied?



3. C is ordered to pull down. Can he pull down wall next to D, thus exposing interior of No. 9—(*a*) Assuming D's walls, when erected, to have been cut into and bonded to C's wall? (*b*) Assuming no such bond, but a straight joint?

4. Assume either B or C to have been ordered to pull down, and thereafter rain drives through the party wall left up. What claims, if any, would arise?

5. Assume either B or C to pull down voluntarily. To what extent would the position be varied? T.

[*** In answer to the foregoing questions :

1. Much depends on where the property is situated. In London, for instance, under the London Building Act, 1930, party walls are specially provided for, and the building owner and adjoining owner have certain rights thereunder. In any case, however, both A and C have a common law right to support and could sue for that, together with damages for nuisance caused by the removal of the walls next their property. B's remedy, to a certain extent, is to appeal against the demolition order in so far as it affects the party wall between B and C and the wall next A.

2. They are the same as in 1: he must preserve the support and prevent nuisance and damage to C's or A's property and furniture, etc., by weather.

3. Not unless he supports D's property and renews wall. The matter of bonding or otherwise does not affect the question if a right of support exists, and it does exist in both cases. C, similarly, would appeal as to the demolition order as far as the wall referred to.

4. If both B and C have been ordered to pull down, no question, of course, can arise as put. Neither B nor C can pull down without taking steps to protect the other's property, even to bricking up to the underside of slating and pointing, etc., the exposed wall —otherwise liable for damages.

5. The position is as in 4.—EDITOR.]

ANSWERS.

Building Management.

[ANSWER TO "CONTRACTOR," OCTOBER 6.]

SIR,—The second edition of the "Building Educator" is suitable for "Contractor's" requirements. G. W. H.

Plaster.

[ANSWER TO "ARCHITECT," OCTOBER 6.]

SIR,—The gauging of undercoats of plaster has the effect of hardening the key between laths, before shrinkages and traffic have tended to damage it while the stuff is green. It is a very desirable practice and is, I believe, encouraged by the Building Research Station authorities. PLASTER.

An Error in Taking Off.

[ANSWER TO "G. H.," SEPTEMBER 29.]

SIR,—I am of the opinion that "G. H." is quite correct in his method of dealing with this question. He tendered, no doubt, in competition, gave a lump-sum price for the job, arrived at from his own taking off, and therefore his quantities do not form part of the contract. If the architect wishes to take advantage of an error in taking off on one item to which he put a p.c. of 12s. 6d. per yard, then he must in all fairness remeasure the whole job, and so give "G. H." the benefit of any errors he has made the other way. PINUS SILVESTRIS.

Treatment of Concrete Ceiling.

[ANSWER TO "F. G. J." (FAVERSHAM).]

SIR,—It is presumed that the concrete is mature. If this is so, the application of oil paint, finished glossy as described, should stand in a suitable atmosphere, without any need for a neutralising fluid, provided all the original limewhite is completely wire-brushed and scraped away. The latter is essential.

SURFACE.

[An answer from the Fairfield Paint Co., has been posted to this correspondent.]

London Building Act.

[ANSWER TO "B.," OCTOBER 6.]

SIR,—The 1930 London Building Act is published by Kelly's Directories, Ltd., 186, Strand, W.C.2, price 7s. 6d. net G. W. H.

Profit on Provisional Item.

[ANSWER TO "Q.," OCTOBER 6.]

SIR,—A building contract of the usual form provides for variations by extending or limiting the contract on schedule. It does not, however, contemplate the abstraction of bulk items from the general contractor's control and the carrying out of this by other means. If the heating contract is dealt with direct in the way indicated, the contractor would be justified in claiming compensation for obstruction to the main contract and probably for use of scaffolding and plant. That is the sort of thing for which profit on sub-contractors' work is allowed. EQUITY.

Forth Road Bridge, Kincardineshire.

The Ministry of Transport has intimated to the Kincardine Road Bridge Joint Committee that a grant of 75 per cent. would be made towards the cost of the proposed Forth-road Bridge, but that they were not prepared to make any contribution before the financial year ended in March next; and that contributions for the year following would be limited to £120,000. The Committee decided to recommend the contributing authorities to go ahead with the bridge and approach the interested burghs for further contributions.

THE BUILDING TRADE

ESSAYS ON BUILDING SUBJECTS—XVI.

By JOHN RAYWOOD

RECONDITIONING SMALL HOUSES.
(*Continued.*)

THOUGH it is desirable that repair work should be carried out on a cost-plus-percentage basis, owners cannot be expected to proceed without setting some limit to expenditure. We are assuming an owner to be in such a position that either his property must be extensively repaired or demolished (there is, of course, the alternative of selling if a purchaser can be found). There are three main factors in the sum to be worked out, all dependent on valuations: the value of the property as it stands, the cost of putting it into such a state of repair that it will be good for a given term of years, and the value of the property when it has been thus repaired. The third cannot always be found by adding the first two together.

The Moyne Report gives some assistance in this matter by stating an opinion as to what amount of money could be safely lent for the purpose of acquiring and reconditioning such property, basing the figures on the assumption that 60 per cent. of the net rent would be required to meet the loan service. Assuming a rate of interest of £3 12s. 6d. per cent. per annum, a house bringing in 7s. 6d. per week, so reconditioned as to have an expectancy of life of thirty years, is said to justify a loan of £213 towards its purchase and repair. What this amounts to is that if £150 will buy the house or represents its value, £63 might be well spent in reconditioning it if it can then be expected to last for thirty years at the same rental. But if money has to be borrowed at a higher rate of interest, which is quite probable while it remains in private ownership and it still needs £63 spending upon it, then its present value is considerably less. These figures do, however, leave a balance of 40 per cent. of the net rent for management and maintenance repairs; and if the owners could be got to see that prompt repair before the damage spreads would lessen the annual cost, there might be a small margin to spare in these calculations. It should, however, be pointed out that such fittings as a kitchen range wear out just as rapidly in a house rented at 5s. per week as in one rented at 10s., and this is where rent control so heavily hits owners in small towns and rural areas. It also to some extent accounts for the unwillingness of some local authorities to take drastic action, for they know where the shoe pinches.

Turning again to repair work in detail, we started from the assumption that the carcassing was sound up to and including the roof covering, but that the brickwork might require repointing. It is seldom worth while to attempt to repair badly-worn stone steps, for in the time they take to cut down in preparation for a new tread they can be broken out and replaced by concrete made with granite chippings or other hard-wearing aggregate. This facilitates the renewal of jambs to door frames, for long dowels can have the concrete worked round them after the new jambs have been fitted. The tops of the new steps should be slightly weathered to throw off water, and budgeting for thirty years it is well worth while to give the frame the protection of cast-iron shoes. These shoes have short dowels as a rule, but by making the jambs a little longer the bottom of the shoe can enter the step.

Ground Floors.

Joisted and boarded floors are not in the long run economical in this type of property, and on the whole it is a mistake to suppose that they make for warmth if the space below is adequately ventilated. It is true that in new houses tile and/or concrete floors strike coldly for a year or so until the building has dried out, but after that there is not much room for complaint. In any case, the majority of tenants will cover the greater part of a living-room floor with linoleum, whether it be wood, tile or granolithic. If the houses to be repaired are without a damp-course it is a good plan to lay new floors with waterproofed concrete on hard, dry filling, and, if it is thought desirable, either the whole surface or a margin may be finished in colour. To avoid subsequent cracking from settlement, one or more supporting piers may be put in before the concrete is laid; and to avoid shrinkage cracks the floor may be quartered and laid in two operations as though it were to be four large thick flags formed and laid in situ. The two first flags laid will be on the diagonal, like squares of the same colour on a draught board. Very large rooms may be effectively treated with squares of differing coloured cement, but that is not within the scope of our present subject.

At one time the provision of wood block in the parlours or living-rooms of cottage properties would have been regarded as luxurious. To-day it is worth while to compare prices and service. One hundred per cent. rift-sawn Columbian pine blocks of inch nominal thickness can, in fairly large quantities, be laid at a surprisingly low price. In new work, in order to arrive at the comparative costs of blocks, regard must be had to the savings made when sleeper walls, walls plates and dampproof coursing ventilation to sub-floor space, the creosoting of floor joists and treatment of the underside of floor-boards are all omitted. On some sites there will be a saving of brickwork to credit to the solid floor, and the rift-sawn (quarter cut) block will stand up to very hard wear. In reconditioning works it may be desirable to have solid floors throughout, and it will be found that blocks compare favourably with tiling. It is essential that they should not be laid before the concrete and floating have thoroughly dried out. Where there is no dampproof course, or where its condition is suspect, it is desirable to form skirtings in waterproofed cement, and their bottom edges may be carried down below the floating of the floors. These also should, of course, be quite dry before the blocks are laid, because, as the floors are to be laid in an old building, there will be no need to leave room for expansion. Laying wood blocks does not cause dirt, and the work may be postponed until the painters are in, at little inconvenience to the tenants.

Internal Plastering.

The principal objection to the use of cement for plastering internal walls is that on account of its impervious qualities the effects of condensation become apparent. This applies with far more force to new buildings not dried out than to old buildings. On a job of this sort there need be no hesitation about forming a cement dado round the walls of all ground-floor rooms and up the sides of the staircase. If the plastering above that line is reasonably sound, it may be patched. Up to dado height, plastering in the small rooms of cottages is subjected to hard wear; above that line the damage would be much lessened were picture rails always provided. In bedrooms, the worst damage is almost invariably found just below the windows, and it is attributable, as a rule, to damp. The ceilings of rooms on the top floor are usually found to be in much worse condition than those of rooms below. To some extent this may be due to roof leakages, but mainly it is occasioned by the use of ceiling joists of too small scantling and the omission of ceiling beams or hangers. The same fault is to be observed in much new work. The methods to be employed in rectification will suggest themselves without need of description here.

Windows.

In the writer's view there is much to be said for sash windows in cottages, either of the ordinary type that require cords and weights, or of what in the North are known as Yorkshire lights, in which the sashes slide sideways. The trouble with casements of the push-out type is that unless set well back from the face of the wall they cannot be left open in wet weather. Top-hung lights may, of course, be used, but not much regard was usually paid to aspect when this sort of property was built, and casement windows cannot be left open before driven rain. Yorkshire lights, by reason of the solid frame and absence of cords and weights, last for very long periods and are therefore economical. That they cannot be left open in wet weather is against them. Almost invariably it will be found that the sash windows have cheap, badly made sash pulleys that wear out the cords by reason of the narrow face and small diameter of the wheels and rough general finish. They should be replaced with others of good quality, and in the long run it would pay to renew the cords throughout the property, even though some of them appear to be in fairly good condition. At the same time the cast-iron weights should be examined for rough edges in the holes receiving the cords.

Front Doors.

The very worst type of front door is that which is provided with bolection moulds. The old-fashioned bead-and-butt flush-panelled door would, under like conditions, outlast two of them. A fairly good repair can be made by taking out the mouldings, deepening the frame rebates and covering the entire face of the door with match boarding. A good thick coat of paint should be applied to the styles and rails of the old doors, and the boards be put on while it is wet and screwed at intervals near the edges; the tongues and grooves of the boards should also be coated. A raised piece with rounded edges should be put under the letter-box plate, and this block and the plate be bedded to exclude moisture. It is the penetration of moisture that destroys outer doors.

Back and Other External Doors.

Doors that open outwards, such as those to coal places, soon fall into decay through exposure to the weather. Where the frames are set flush with the external face of the wall the doors would last much longer if the opening were protected with a hood or drip mould. The ordinary ledged door would last much better than it usually does if the unseen portions were always painted before assembly; but in many cases not only is this neglected but the doors are not even diagonally braced. The neglect of bracing is fatal, for the door lets down a little, binds either on the floor or step or in the frame, and is then roughly used. The movement also disturbs the joints and permits the entry of moisture. Ledged-and-braced doors are quite good enough for cottage work if they are properly made and securely hung. Some of them have been known to last for fifty or sixty years without repair.

(*To be continued.*)

Index of B.S.I. Specifications.

The British Standards Institution have issued their half-yearly handbook, which includes the report presented at the last annual general meeting as well as the indexed list of current British Standard Specifications. The report on the activities of the three divisions—engineering, building and chemical—provides interesting reading and shows the enormous amount of valuable work voluntarily carried out by the Institution's six hundred technical committees. The section devoted to lists of British Standard Specifications includes a numerical list, the new specifications in course of preparation, and a complete subject index. Copies of this most useful publication (under Reference C.D. 800) are available from the British Standards Institution (Publications Department), 28, Victoria-street, London, S.W.1, price 1s. 2d., post free.

THE BUILDING RESEARCH STATION

QUESTIONS AND ANSWERS.

THE following abstracts of inquiries* represent a number of those recently submitted to the Building Research Station. The information given in the replies quoted is based on available knowledge. It has to be borne in mind that further scientific investigations may, in the course of time, indicate directions in which the replies might be supplemented or modified. Moreover, the replies relate to the specific subject of each inquiry, and are not necessarily suitable for general application to all similar problems.

Limes for Building Purposes.

A contractor requested the opinion of the Building Research Station on the properties and relative merits of a greystone lime in the form of a dry hydrate and a high calcium "mountain" lime, either in the form of a "putty" or a dry hydrate.

Reply.—Limes commonly used for building purposes may be classed as :—

(a) Eminently hydraulic, *i.e.*, those which have a definite set (comparable in some ways with that of Portland cement), and which will harden even under damp conditions.

(b) Moderately hydraulic, *i.e.*, those which will harden under damp conditions, but which have a slower set than (a).

(c) Non-hydraulic, *i.e.*, those which have no inherent setting power and which harden only by drying out and subsequently by the slow process of carbonation on exposure to air.

The greystone limes come under (b) above, and require about one month to develop appreciable hydraulic strength. When properly hydrated, such a lime will retain its hydraulic properties, but these will be lost if putty is stored or if dry hydrate is soaked for long periods.

A high calcium lime, whether in the form of a putty or a dry hydrate, comes under (c) above, and has in itself no definite set. Such a lime may, however, be used for purposes where strength is required, if it is gauged with a material that has a definite set, or if it is mixed with suitable types of ashes, burned clay or other pozzolana. By the first method, an early strength corresponding to the set of the gauging material can be obtained; by the second, the development of strength will be slow, depending on various factors, such as temperature and humidity, and in this respect the mix will be more comparable with a moderately hydraulic lime.

A greystone lime may, of course, also be similarly gauged where an early or increased strength is required.

The chief difference between a dry hydrate and an ordinary putty may be said to be that a dry hydrate is purchased practically ready for use, whereas the putty has to be prepared by the builder by slaking the lime. In the former case, therefore, reliance must be placed on the manufacturer exactly as has to be done in the case of cement. The manufacturer should be prepared to give a guarantee of soundness on request, and the lime should be tested by the purchaser from time to time by the simple test devised at this Station. In the case of a putty, the builder must rely on his own experience and skill in slaking and storing the particular lime in the most suitable manner, but if these are adequate, a good and sound putty should always be obtained. Although the workability of the putties from different types of lime varies considerably, mixes of dry hydrates made from different types have usually approximately similar workabilities.

The workability of a dry hydrate is usually definitely lower than that of a putty, and, consequently, a different technique is required by the plasterer when using such a lime. For the same reason, the sand-carrying capacity of a dry hydrate is lower than that of a putty, and failures, which occur when a plasterer accustomed to the use of a putty is called upon to use a dry hydrate for the first time, are frequently attributable to the use of too much sand.

Unsoundness of a lime is manifested as overall expansion of the mortar or as "popping and pitting" due to the expansion of unslaked or unhydrated particles present in the mix. Such unsoundness may be found both in putties and in dry hydrates, and, whereas a strictly limited degree of unsoundness is allowable in bricklayer's mortar, it is most undesirable in plastering limes.

Soaking a hydrate is beneficial, since it both removes unsoundness and renders the mix more plastic. The only disadvantage is that more than two hours' soaking will materially reduce any hydraulic properties present. In the case of high calcium limes, which are not hydraulic, the best practice is to mix the hydrate to a putty with hair and sand, in a large pile, at least the day before use. If it is to be gauged with plaster or cement, this must be done in small batches just before use.

It will be evident from the above that each of the limes under discussion has slightly different properties and calls for different handling, both in preparation and in use. Nevertheless, if properly handled, each can be used for various purposes, and the strength of the set plaster can be adjusted by the proportions of gauging material added.

Since, however, proper handling is of such importance, it is most desirable that a plasterer, when called upon to use a lime to which he is not accustomed, should be given every opportunity thoroughly to familiarise himself with the properties of the material before using it on a large scale. Alternatively, it is sometimes wise to select a lime with which the particular plasterer is familiar.

Effects on Plaster of Salt Water in Concrete Walls.

A fire which occurred in a concrete house, near the sea, was extinguished by running hoses to the beach and pumping sea-water over the building. It was later proposed to repair the house and to replaster the interior; but the architect feared that the salt water had penetrated into the body of the concrete blocks, and that the salts might appear later on the face of the new plaster. He proposed having the walls washed down before replastering, and wished to know whether there was any chemical treatment which might counteract the effects of the salts, or, indeed, extract them from the walls altogether.

Reply.—Two classes of trouble are likely to occur as a result of the concrete having been soaked with sea-water :—

(1) When the walls dry, salts may be deposited upon their inner surfaces in the form of efflorescence.

(2) If hygroscopic salts have been absorbed in any quantity, the walls may remain permanently damp.

The Building Research Station has no record of any chemical which could be used with water to prevent the efflorescence of the salts. Moreover, it is quite likely that washing with plain water might tend to drive the salts back into the body of the wall. A better method would be to dry the walls as thoroughly as possible before replastering, and to remove, by vigorous brushing, the salts which come to the surface.

After as much efflorescence as possible has been removed in this way, a wash of sodium phosphate solution could be applied, and would tend to convert the hygroscopic salts into non-hygroscopic compounds. Although the Building Research Station has no direct experience of such a treatment, it is understood that the method has been applied with success in a previous similar case.

It is suggested that, after the walls have been dried and brushed to remove efflorescence, they should be lightly sponged down with a solution of not more than 1 lb. of disodium hydrogen phosphate to 2 gallons of water, and then allowed to dry. If signs of dampness persist, the process may be repeated, but this should not be done more than once or twice.

The above treatments may be satisfactory if the walls have only absorbed a small quantity of salts from the sea-water. A more certain method of ensuring freedom from both classes of trouble would be to batten out with creosoted timber and finish either with lath and plaster or with wallboard, which would thus be out of capillary contact with the brickwork.

Temperature Rise in a Concrete Bridge.

An arch bridge was to be built in 1 : 2 : 4 concrete, the abutments being 8 ft. wide, 12 ft. high and 30 ft. long, and the arch rib 2 ft. thick. The public authority concerned wished to know what would be the temperature rise in the abutment during setting and hardening, and also the ratio of the annual temperature fluctuation in this abutment to the annual fluctuation in the arch rib.

Reply.—During the process of setting and hardening the temperature of concrete rises to a maximum and then falls. The magnitude of the rise and the subsequent rate of cooling depends, amongst other things, on the size of the mass of concrete and the type of cement used. The maximum temperature rise will be attained near the centre of the mass, and there will be a temperature gradient from this point to the exterior surfaces, since these latter lose heat more readily by radiation and conduction to the air. Several months may elapse before the temperatures throughout the mass have fallen to a fairly uniform value. During the cooling period an uneven distribution of the stresses will be set up as a result of the irregular temperature gradients in the mass, and the unevenness will be particularly marked if the concrete has been placed rapidly and in large quantities.

In this particular case, it is estimated that if the whole abutment is poured in one operation, using good quality Portland cement, the temperature rise during setting and hardening is likely to be of the order of 75 deg. to 80 deg. F., and under normal conditions two months or more would be needed for the mass to cool down to the average air temperature. The possible ill-effects of high internal temperatures could be reduced by concreting the abutments in lifts of, say, 3 ft. to 4 ft., with intervals of one to two days between each lift to assist in the dissipation of the heat evolved.

With regard to the second query, it is evident that during alternate hot and cold weather the fluctuation in temperature of the large mass of the abutment will be less than the fluctuation of the arch rib. It is estimated that the annual range of variation in temperature in the abutment will be approximately two-thirds of that in the arch rib.

Concrete Bricks.

A surveyor asked the general opinion of the Station on concrete bricks, particularly with reference to their load-bearing capacity, resistance to moisture penetration and suitability as a base for plaster or external rendering. In particular, he wished to know whether a calcium sulphate (gypsum) plaster could safely be applied to them.

Reply.—As with all cement products, the method of manufacture, and particularly the control of drying and maturing of concrete bricks, is of very great importance. All cement products are liable to considerable shrinkage on drying, and it is important that this shall have taken place to the greatest possible extent before the bricks are used. The Building Research Station has examined cases where inadequately matured bricks laid in a wall have subsequently led to the formation of shrinkage cracks penetrating through the wall and sufficiently large to allow moisture to enter.

The permeability and load-bearing capacity of concrete bricks depends, of course, on the quality of the particular product, but bricks made by a reliable manufacturer should be satisfactory in these respects, for all ordinary building purposes.

The satisfactory application of external rendering or internal plaster must, again, depend on the nature of the particular brick, since the "suction" of the brick will play a part. There is, however, no reason why plaster should not be applied to satis-

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factory bricks, and there should be no objection to using a calcium sulphate plaster. The high moisture movement of concrete bricks, as compared with clay bricks, must, however, increase the possibility of shrinkage crack formation in any plaster or rendering.

Bonding Aluminous Cement Concrete to Portland Cement Concrete.

In a floor, the topping, made with a high alumina cement, had failed to adhere to a Portland cement concrete base, and a firm of cement manufacturers put the following questions to the Station :—

(1) Does concrete made with high alumina cement bond effectively to concrete made with Portland cement in the following cases : (a) for construction joints; (b) for floor toppings (c) for renderings? (2) Could a thin layer of high alumina cement concrete (say, 1 in. to 3 in. thick) be placed effectively on a base of : (a) Portland cement concrete; (b) high alumina cement concrete?

Reply.—It should be mentioned at the outset that most of the work on bonding new concrete to old, which has been carried out at the Building Research Station, has, so far, been confined to the problem of producing good construction joints. This has been fully described in Building Research Special Report No. 16, " Construction Joints in Concrete. Bonding New Concrete to Old." (H.M. Stationery Office, price 2s. net.) Some slight reference is made in that report to bonding in concrete floor construction.

Dealing with the queries in rotation :—

1. (a) It is the experience of the Station, and also of some other investigators, that it is possible to bond high alumina cement concrete effectively to concrete made with Portland cement, provided that the Portland cement concrete is well matured (see page 50 of the report cited above). There is little or no hope of bonding high alumina cement concrete to Portland cement concrete that is immature.

The tests carried out at the Building Research Station showed that high alumina cement concrete, which had been bonded to Portland cement concrete two months old, adhered excellently up to one year after bonding; tests at longer ages were not made.

1. (b) and (c) The question of rendering Portland cement concrete with high alumina cement mixes for floor toppings and external stucco is a difficult one, and, as has already been said, the experience of this Station is somewhat limited in this respect. A tendency has, however, been noted for high alumina cement mortar to lift when laid on a Portland cement concrete base; possibly the rapid rate of shrinkage experienced with high alumina cement during the early stages of maturing may account for some of this trouble.

2. (a) The question whether a thin layer of high alumina cement concrete, as in a floor topping, can be placed on Portland cement concrete is answered by the comments on queries 1 (b) and (c).

With regard to query 2 (b), about the efficacy of an application of high alumina cement concrete to high alumina cement concrete, it is the opinion of the Station that, by careful workmanship, it is possible to carry this out with good results. The best results would doubtless be obtained by following a technique similar to that suggested in the American Standard Specification for Concrete Floors (Proc. Amer. Conc. Inst., 1921, *17*, 258-66), from which the following paragraph is quoted :—

" *Clause* 55.—The wearing course shall be placed immediately after mixing. It shall be deposited on the fresh concrete of the base before the latter has appreciably hardened, and brought to the established grade with a strike-board. In no case shall more than 45 minutes elapse between the time the concrete for the base is mixed and the wearing course is placed."

To sum up, it cannot be said that it is impossible to lay thin layers of high alumina cement concrete or mortar, either as floor finishes or as renderings, but it is difficult. In all cases the high alumina cement rendering should be kept *thoroughly* wet for at least twenty-four hours after placing.

TRADES TRAINING SCHOOLS

DISTRIBUTION OF PRIZES.

At the Carpenters' Hall on Tuesday evening last the prizes were presented to the students of the Trades Training Schools by the Right Hon. H. A. L. Fisher, M.A., the chair being occupied by Mr. Herbert C. Preston, Master of the Carpenters' Company. Among those present were Sir Banister Fletcher (Director of the Schools), Sir W. Goscombe John, R.A., Sir Brumwell Thomas, Sir John Stavridi, and Messrs. Walter Tapper, A.R.A., E. Guy Dawber, A.R.A., F. Adams Smith, F. Stanley Sutton, Lt.-Col. A. C. Preston, Lt.-Col. Wilson Pace, Stanley Palmer, H. T. Butler, W. F. Newson, T. B. Townson, W. T. Plume, G. C. Barnes, Alexander Howard, Herbert Chappell, Arthur Bedford, W. T. Minn, H. W. Preston, Louis Jacob, Godfrey Giles, George Parlby, and J. Hutton Freeman (the Clerk).

The Chairman of the Schools Committee (Mr. F. Adams Smith), in the course of his annual report, said that there were at present 250 students on the books, and no doubt that number would be increased. It was very gratifying to see such a large attendance at that meeting : it showed the great interest that was taken in the work of the schools. The speaker then paid a tribute to the work of the instuctors, and especially Sir Banister Fletcher (Director of Schools), to whom they owed a very great deal; he put his very heart into the work. Concluding, the speaker invited members of the audience to visit the schools in Great Titchfield-street, and drew attention to an exhibition of students' work in Carpenters' Hall, which, he said, was really first-class, and would compare with the work of any institution in London.

Sir Banister Fletcher then read his annual report for session 1932-33, in the course of which he said the attendance for the session reached a total of 13,319, giving an average of 89.39 students per evening, which, considering the large amount of illness, including influenza, was a very satisfactory average. The judging of the work of the students was held on May 12 last, and the judges were very much impressed with the work throughout the school, and commended the high level of excellence which had been attained. Having paid a tribute to the work of the instructors, the speaker said a great depression in trade was being generally experienced, with the result that there was a great deal of unemployment. In these critical times, therefore, many craftsmen found it difficult to pay their fares to and from the school, but they would be well advised to make every effort to do so, always bearing in mind that they would thereby be in a position to take full advantage of the time of prosperity to which we all anxiously looked forward. The depression in trade had affected the attendance of all the technical schools of London, and last session it was reported in *The Times* of March 23 that in the technical institutions there was a substantial falling off in the attendances, so that there were 14,000 fewer evening students, which was largely the result of unemployment. In view of this statement it was satisfactory to think that the Trades Training School practically maintained its average attendances. This was largely due to the fact that it was recognised throughout the building industry that at the Trades Training School instruction was given by real practical instructors and the equipment and work executed were of a high standard.

Addressing the students, the speaker said he would urge them to form the habit of concentrating upon their work in life. The instruction given in that school provided a solid foundation of craftsmanship, and repeatedly they had received letters from past students who had attained leading positions in all parts of the British Empire. These letters recorded their indebtedness to the school for the knowledge and skill acquired therein, and all recorded with satisfaction the time spent at the Trades Training School.

The Right Hon. H. A. L. Fisher then presented the prizes, after which he gave an address, in the course of which he said he had had the pleasure of visiting the school under the guidance of Sir Banister Fletcher, and had studied the work done in the various classes. He was filled with admiration for the work which he had seen, and realised how much care, energy, skill and real artistic taste had gone to its production. An American lecturer, he continued, had compared life to a field strewn with diamonds, which were the opportunities and real treasures of life; and the ability to pick up the diamonds was the power and knowledge of education. He urged upon the students the value of a habit of strict discipline and industry. He urged them all to be ambitious. Industry was the basis of success. A large number of the great men of the world had risen from humble circumstances, and their success was due to high ambitions found in youth and realised in mature age by unremitting and dauntless energy. He was very much impressed with the importance of technical education. At one time our exports had held their own in the markets of the world by cheapness, but to-day we could not hope to compete with the mass-production methods of the Americans, and if our exports were to hold their own, they must be stamped with a special measure of excellence and skill. They must aim at perfection. A Greek philosopher had said that the only pleasure that was not followed by pain was the sight of beautiful things. There was no need for anything to be ugly. He was impressed by the fact that the work of the students of the school was not only substantial, but looked well; they aimed not only at utility but at beauty. He wished the school many years of prosperous, happy and successful work.

A hearty vote of thanks to Mr. Fisher was proposed by Mr. Godfrey Giles and seconded by Mr. T. B. Townson.

A hearty vote of thanks to the chairman was proposed by Mr. Herbert Chappell and seconded by Mr. G. C. Barnes. The proceedings then terminated.

DRAFT BRITISH STANDARD SPECIFICATIONS FOR JOINERY.

The British Standards Institution has recently issued for critical consideration and comment two draft British Standard Specifications for Wooden Mouldings and Windows respectively. The request for the preparation of these specifications emanated from the National Federation of Building Trades Employers, who recommended that consideration be given to the desirability of setting up standards for mouldings and double-hung sashes and casement windows. The request went before the Building Divisional Council, and was by them referred to the appropriate and fully representative technical committee which has gone carefully into the details. The draft specifications are intended to provide for joinery for use in the cheaper classes of building work, the needs of which are principally catered for by the manufactured joinery industry. The principal aims of the committee in this work have been to reduce the multiplicity of types and sizes at present called for; to concentrate on ordinary normal demands and so assist makers to carry stock economically; and as far as practicable to reduce production costs as well as endeavour to improve quality of design. Copies (under reference C.D. (B) 779 and C.D. (B) 778) are available to interested readers, whose co-operation in submitting constructive criticism is invited, and may be obtained from the Publications Department of the British Standards Institution, 28, Victoria-street, London, S.W.1, price 1s. 2d. each, post free.

Obituary: Mr. Samuel Wright.

We regret to announce the death, at his home, Maldon, Essex, of Mr. Samuel Wright, managing director and founder of Messrs. Samuel Wright and Co., Ltd., of Hackney. He was 86.

NEW BUILDINGS IN LONDON

BRENTWOOD.—CHURCH.—A contract has been let to Messrs. Pitchers, Ltd., 57, Ashburton-grove, N.7, for the proposed Church of St. George, on the Costed Manor Estate, Ongar-road. The plans have been prepared by Messrs. Crowe, Careless & King, Lloyds Bank-chambers, Romford.

CAMBERWELL.—EXTENSION.—An application has been made to the B.C. by Mr. S. A. S. Yeo, Station-chambers, 56, Turnmill-street, E.C.1, for a small extension to the "Montpelier" beer-house, Boathouse-walk. No contract has yet been placed.

CAMBERWELL.—HOUSES.—The B.C. has approved an application by Mr. A. H. Holmes for the erection of houses on north-west side of Ryedale, next to Cornflower-terrace, S.E.

CAMBERWELL. — PREMISES. — It having been brought to our notice that the paragraph referring to Messrs. Charles Barrett's extensions, which we published in our issue of October 6, is liable to be misconstrued, we take this opportunity of stating that Messrs. Barrett have erected large extensions to their works in a short space of time, and with no disturbance whatever to their extensive production. These works are now considered to be among the most up-to-date in London, being fully equipped with the latest machinery throughout.

CATERHAM. — HALL. — The parochial council of St. John's are to build a new church hall. The architect is Mr. H. R. Martin, Fawsley, Caterham.

CHEAM.—REBUILDING. — A contract has been placed with Messrs. Truett & Steel, Ltd., 71, High-street, Thornton Heath, for the rebuilding of the Gander Green Stores. Mr. G. Gordon Stanham, 26, Bush-lane, E.C.4, is the architect.

CHELSEA.—FLATS.—Building will commence soon on erection of a block of flats, etc., in Cheyne-walk, S.W.3, for which plans have been prepared by Mr. W. H. Binns, F.S.I., 23, Bloomsbury-square, W.C.1. No contracts have been placed yet.

CHESHAM-PLACE. — FLATS. — Chesham-House, S.W.1, is to be reconstructed as modern service flats. The contractors are Messrs. W. H. Gaze and Sons, Ltd., High-street, Kingston-on-Thames. The architects are Messrs. Joseph, 2, Paul's Bakehouse-court, E.C.4.

CHISWICK.—SHOPS.—The site of the old Coliseum Cinema, Chiswick High-road, W.4, has been sold for the erection of shops and flats. Arrangements are in the hands of Messrs. Tyser, Greenwood and Co., 386, Chiswick High-road, W.4.

CITY-ROAD.—EXTENSIONS.—The British Drug Houses, Ltd., Graham-street, Islington, N., contemplate the extension of their factory in Wharf-road, N.1. Plans have been prepared by the company's staff, but no contracts settled.

EALING.—EXTENSION.—Sketch plans are to be prepared by the Borough Engineer for submission to the E.C. for a senior department of Horsenden schools

ELEPHANT AND CASTLE.—BRANCH.—The Liverpool Victoria Friendly Society, Victoria House, Southampton-row, W.C.1, has accepted the tender of Messrs. Ashby & Horner, Ltd., 8, Aldgate, E.1. for premises in London-road, S.E.1. Plans have been prepared by the company's surveyor.

ELTHAM.—BANK.—Bank pemises are proposed at Footscray-road, Eltham. The building work will be carried out by Mr. W. Childs, "Lemmonwell," Bexley-road, Eltham.

FELTHAM.—HOUSES.—The erection of 200 houses are proposed at Walton-gardens. The architect is Mr. W. J. Green, F.F.A.S., 5, Bridge-road, Woolston, and the building contract has been placed with Messrs. Jones & Sons, Upper Alwyn-road, Maidenhead.

FRIERN BARNET.—ESTATE.—The Halliwick Estates Co., Ltd., Finchley, N.12, are to develop the Church Farm estate, the first section of which comprises roads, sewers, and 126 houses. The work will be carried out by the company, to its own plans.

GIDEA PARK.—ADDITIONS.—Including a new chancel, etc., are to be made to All Saints' Church, at a cost of about £2,500. The contractors are Messrs. Pitchers, Ltd., 57, Ashburton-grove, N.7. The architects are Messrs. Crowe & Careless, 74, Great Russell-street, W.C.1.

HACKNEY.—DWELLINGS.—The trustees of the Samuel Lewis Trust for Dwellings for the Poor, 13, Great James-street, Bedford-row, W.C., are about to erect further model dwellings on the site of Nos. 189-195, Amhurst-road, N. The contract has been placed with Messrs. Higgs & Hill, Ltd., Crown Works, South Lambeth-road, S.W.8, whilst the demolition and excavation is by Messrs. Greenham Demolition Co., Ltd., Isleworth. The architects are Messrs. Joseph, 2, Paul's Bakehouse-court, E.C.4

HACKNEY.—FACTORY.—Factory premises are to be built in Morning-lane, E.9, for Messrs. Lewis Berger and Sons, Ltd. The contract has been placed with Messrs. Trollope and Colls, Ltd., 5, Coleman-street, E.C.2. Messrs. Henry Tanner, 3, Hanover-square, W.1, are the architects.

HAMMERSMITH.—FLATS. — A block of flats and shops is to be erected at 144-172, Hammersmith-road, W. There will be 354 flats, and 34 lock-up shops, etc., the cost being estimated at approximately £325,000. The contractors are Messrs. E. D. Winn & Co., Ltd., 36, Wilton-place, Knightsbridge, S.W. The architect is Mr. S. Gordon Jeeves, F.R.I.B.A., 16, Hanover-square, W.1.

HENDON.—SHOPS.—Plans have been prepared for a block of 12 flats, together with 9 shops with 6 flats over, on a site in Woodfield-avenue, Edgware-road, N.W. The architect is Mr. S. A. S. Yeo, Station-chambers, 56, Turnmill-street, E.C.1. No contracts have been placed yet.

HOUNSLOW.—EXCHANGE.—Messrs. Perrys (Ealing), Ltd., 16, Uxbridge-road, Ealing, W.5, have secured the contract for the erection of an employment exchange for H.M.O.W.

ISLEWORTH.—FLATS.—A contract for the erection of 170 flats on the Syon Hill estate, Great West-road, has been placed with Messrs. E. & J. Cotton, Ltd., 74, High-road, Chiswick, W.4. The architects are Messrs. Marshall & Tweedy, FF.R.I.B.A., 4, Cavendish-place, Cavendish-square, W.1.

MARGARET-STREET. — PREMISES. — The site of No. 19 is to be developed for shops and offices, plans having been prepared by Messrs. W. A. Lewis and Partners, 11, Finsbury-circus, E.C.2. The contract has been placed with Messrs. Perry and Perry, 20, Woodstock-street, W.1.

MUSWELL HILL.—FLATS.—A contract will be placed soon for a block of flats at Connaught-gardens, N.W. The plans have been prepared by Messrs. Bomer and Gibbs, FF.R.I.B.A., 84, Grosvenor-street, W.1.

NORTH WATFORD. — PREMISES. — New dairy premises are to be erected at 460, St. Albans-road, for the Express Dairy Co., Ltd., Tavistock-place, W.C.1. Mr. Eric N. Smallwood, architect to the company, has prepared the plans, and the work will be carried out by Mr. C. A. Wiseman, of Osterley Park, whose tender price was £2,930.

NORTHWOOD. — HOUSES. — The Ruislip-Northwood Council has approved the lay-out of 369 houses, sections of roads and sewers for a further section of the Manor Homes estate, for Messrs. George Ball (Ruislip), Ltd. The plans were submitted by Mr. W. F. Hobbs.

PECKHAM.—BUILDING.—The L.C.C. has passed on to the B.C. an application by Mr. E. W. Room, of Four Elms, Dulwich Village, for erection of a building on the site of the Borough of Camberwell Central Unionist Club, 28, Peckham-road. No architect has been definitely appointed.

RICHMOND.—FLATS.—The site of Litchfield House, Sheen-lane, has been acquired by Messrs. David Ainslie & Co., Ltd., 35, Panton-street, W.1, for development by the erection of blocks of flats. Plans are to be prepared.

SOUTHWARK.—PREMISES.—Messrs. Barclay, Perkins and Co., Ltd., Park-street, S.E.1, have acquired a site adjoining the "Rose and Crown" public-house, 65, Union-street, S.E., for enlargement and rebuilding. The contract has been placed with Messrs. Y. J. Lovell and Son, 6, Bathurst-street, W.2. The plans have been prepared by Mr. S. Towse, F.R.I.B.A., 9, Newcomen-street, S.E.1.

STEPNEY. — DWELLINGS. — The Stepney B.C. is to erect nine dwellings at 23-27, Old Gravel-lane, and three cottages at 31, Church-row, Limehouse, in two contracts. Mr. Bernard Belsher, F.R.I.B.A., Municipal Offices, Raine-street, E.1, has prepared plans. Applications to tender must be made, with deposit of £3 for each contract, by October 23.

ST. JOHN'S WOOD.—FLATS.—A site in Grove End-road and Melina-place, N.W.6, has been sold by Messrs. Anscombe and Ringland, 8, Wellington-road, N.W.8, for development by the building of flats. A contract for preliminary works has been placed with Mr. A. J. Elvin, Wembley, but no further tenders have been considered yet. The architects are Messrs. Gunton and Gunton, Empire-house, St. Martin's-le-Grand, E.C.1.

SUTTON. — EXCHANGE. — H.M.O.W. have placed a contract with Sir William Prescott & Sons, Ltd., Trafalgar House, White Hart-lane, Tottenham, N.17, for the erection of the employment exchange.

TOTTENHAM.—FACTORY.—The tender of Messrs. Chessums, Ltd., Imperial-works, Portland-road, Tottenham, N., has been accepted by Messrs. Lieberman and Harding, Ltd., 65, Kingsland-road, Hackney, N., for their new factory and offices at Phillip-lane, N. The plans have been prepared by Messrs. Wallis, Gilbert and Partners, Coastal-chambers, Buckingham Palace-road, S.W.1.

WEMBLEY.—SWIMMING POOL.—The contract for a new swimming pool, etc., which is to be built at Wembley for the Wembley Stadium, Ltd., has been placed with Messrs. Holloway Bros. (London), Ltd., 157, Millbank, S.W.1. The plans, which are by Sir E. Owen Williams, K.B.E., 5, St. George's-road, S.E.1, provide seating accommodation for 12,000 people. The work is estimated at £150,000.

WIMBLEDON.—RESIDENCE.—Tenders are being considered for a residence in Princes-road, S.W. The plans have been prepared by Sir Edwin Lutyens, R.A., 13, Mansfield-street, W.1.

Trade Help for the Unemployed.

The Grith Fyrd Camp, at Sandy Balls Wood, near Fordingbridge, on the edge of the New Forest, has been helped by sundry gifts from merchants and manufacturers. The camp is a reconditioning centre, recognised by the Ministry of Labour, for young men between 18 and 25 years of age, for whom no place is found in industry, and who seek an opportunity to live an active and healthy life. Among those firms who have made gifts are :—Messrs. Guest, Keen, and Nettlefolds, Ltd.; A. W. Fitzgerald and Co.; Montague Meyer, Limited; Buck and Ryan; and W. Gilbertson and Co., Ltd. The materials presented are being used chiefly for the building of a permanent craft hut in which to instal the men's weaving loom and other apparatus. Selected unemployed men to the number of about fifty have been enlisted in Grith Fyrd for eighteen months' training, but already several have been offered and taken jobs before their training is completed. Tools and materials, especially for the construction of permanent winter quarters, are at the moment wanted more urgently than money. A list of "wants" has been prepared, and can be had from the Hon. Secretary, Dr. J. Norman Glaister, Grith Fyrd Camps, Toynbee Hall, E.1.

RATES OF WAGES IN THE BUILDING TRADE

AS AND FROM 1st OCTOBER, 1933.

[Every endeavour is made to ensure accuracy, but we cannot be responsible for errors.]

	Crafts-men.	Lab-ourers.
Aberdare	1/5	1/0½
Abergavenny	1/5	1/0½
Aberystwyth	1/2	10½
Accrington	1/5½	1/1½
Aldeburgh	1/1½	10½
Aldershot	1/2	10½
Alfreton	1/5½	1/1½
Alnwick	1/4½	1/0½
Altrincham	1/5½	1/1½
Amble	1/4½	1/0½
Amersham	1/3½	11½
Ammanford	1/5½	1/1½
Andover	1/2	10½
Arundel	1/2½	11
Ascot	1/3½	11½
Ashby-de-la-Zouch	1/4	1/-
Ashford (Kent)	1/2	10½
Ashford (Middx.)	1/4	1/-
Ashington	1/4½	1/0½
Ashtead	1/4	1/-
Ashton-under-Lyne	1/5½	1/1½
Aylesbury	1/2½	11
Aylsham	1/2	10½
Bagshot	1/2	10½
Banbury	1/3	11½
Barnsley	1/5½	1/1½
Barnstaple	1/3½	11½
Barrow-in-Furness	1/5½	1/1½
Barry	1/5½	1/1½
Basingstoke	1/3	11½
Bath	1/4	1/-
Batley	1/5½	1/1½
Beaconsfield	1/3½	11½
Beccles	1/2	10½
Bedford	1/4	1/-
Berkhamsted	1/2	10½
Berwick	1/4½	1/0½
Beverley	1/5½	1/1½
Bexhill	1/3	11½
Bideford	1/3½	11½
Biggleswade	1/3	11½
Billericay	1/2	10½
Birchington	1/3	11½
Birkenhead	1/7‡	1/2½
Birmingham	1/5½	1/1½
Bishop Auckland	1/5	1/0½
Bishops Stortford	1/3	11½
Blackburn	1/5½	1/1½
Blackpool	1/5½	1/1½
Blindley Heath	1/3	11½
Blyth	1/5½	1/1½
Bognor Regis	1/2½	11
Bolton	1/5½	1/1½
Bournemouth	1/4	1/-
Bracknell	1/3	11½
Bradford	1/5½	1/1½
Bradford-on-Avon	1/2*	10½
Braintree	1/3½	11½
Brentwood	1/5	1/0½
Bridgwater	1/3	11½
Bridlington	1/5	1/0½
Brighouse	1/5½	1/1½
Brighton	1/4	1/-
Bristol	1/5½	1/1½
Broadstairs	1/3	11½
Bromsgrove	1/4½	1/0½
Bromyard	1/1½	10½
Buckley	1/5½	1/1½
Bungay	1/1	9½
Burnham-on-Crouch	1/2	10½
Burnley	1/5½	1/1½
Burslem	1/5½	1/1½
Burton-on-Trent	1/5½	1/1½
Bury	1/5½	1/1½
Bury St. Edmunds	1/2½	11
Buxton	1/5	1/0½
Byfleet	1/3	11½
Cambridge	1/4½	1/0½
Canterbury	1/2½	11
Cardiff	1/5½	1/1½
Carlisle	1/5½	1/1½
Carnforth	1/5½	1/1½
Castleford	1/5½	1/1½
Caterham	1/4	1/-
Chard	1/1½*	10½
Chatham	1/3½	11½
Chelmsford	1/3½	11½
Cheltenham	1/4	1/-
Chepstow	1/4½	1/0½
Chertsey	1/4	1/-
Chester	1/5½	1/1½
Chesterfield	1/5½	1/1½
Chichester	1/2½	11
Chorley	1/5½	1/1½
Cirencester	1/2½*	11
Clacton	1/3½	11½
Cleveleys	1/5½	1/1½
Clitheroe	1/5½	1/1½
Cobham	1/4	1/-
Colchester	1/4	1/-
Colwyn Bay	1/4½	1/0½
Congleton	1/5	1/0½
Coventry	1/5½	1/1½
Cranbrook	1/1	9½
Cranleigh	1/2½	11
Crawley	1/3	11½
Crewe	1/4½	1/0½
Cromer	1/2	10½
Crowborough	1/3	11½
Cuckfield	1/3	11½
Darlington	1/5½	1/1½
Darwen	1/5½	1/1½
Daventry	1/3½	11½
Deal	1/2½	11
Denbigh	1/4	1/-
Derby	1/5½	1/1½
Devizes	1/2*	10½
Dewsbury	1/5½	1/1½
Didcot	1/3½	11½
Diss	1/2	10½
Doncaster	1/5½	1/1½
Dorchester	1/2½*	11
Dorking	1/3	11½
Dover	1/2½	11
Dovercourt	1/3½	11½
Driffield	1/4	1/-
Droitwich	1/4½	1/0½
Dudley	1/5½	1/1½
Dunstable	1/2	10½
Durham	1/5½	1/1½
Eastbourne	1/4	1/-
E. Glam. (Mon. Val.)	1/5	1/0½
East Grinstead	1/3	11½
Edenbridge	1/3	11½
Ely	1/2	10½
Epping	1/4	1/-
Exeter	1/4½*	1/0½
Exmouth	1/3	11½
Fakenham	1/2	10½
Falmouth	1/3½	11½
Fareham	1/3	11½
Faversham	1/2	10½
Felixstowe	1/4	1/-
Filey	1/4	1/-
Fleetwood	1/5½	1/1½
Flint	1/5½	1/1½
Folkestone	1/2½	11
Frinton-on-Sea	1/3½	11½
Frome	1/2½*	11
Gainsborough	1/4	1/-
Gateshead	1/5½	1/1½
Gillingham	1/3½	11½
Glossop	1/5½	1/1½
Gloucester	1/4½*	1/0½
Godalming	1/3	11½
Goole	1/4½	1/0½
Gosport	1/4	1/-
Grantham	1/4	1/-
Gravesend	1/5	1/0½
Gt. Yarmouth	1/3	11½
Grimsby	1/5½	1/1½
Guildford	1/3	11½
Guilsborough	1/3½	11½
Halifax	1/5½	1/1½
Hanley	1/5½	1/1½
Harpenden	1/3	11½
Harrogate	1/5½	1/1½
Hartlepools	1/5½	1/1½
Harwich	1/3½	11½
Haslemere	1/2½	11
Hastings	1/2½	11
Hatfield	1/4	1/-
Haywards Heath	1/3	11½
Hednesford	1/4½	1/0½
Hemel Hempstead	1/4	1/-
Henley	1/3½	11½
Hereford	1/3½*	11½
Herne Bay	1/2	10½
Hertford	1/4	1/-
Heysham	1/5½	1/1½
Hitchin	1/3½	11½
Hoddesdon	1/4	1/-
Holt	1/1	9½
Horley	1/3	11½
Horsham	1/2½	11
Horwich	1/5½	1/1½
Huddersfield	1/5½	1/1½
Hull	1/5½	1/1½
Hunstanton	1/2	10½
Huntington	1/2½	11
Ilfracombe	1/2½	11
Ingatestone	1/3	11½
Ipswich	1/4	1/-
Isle of Thanet	1/3	11½
Isle of Wight	1/2	10½
Keighley	1/5½	1/1½
Kenilworth	1/5½	1/1½
Kettering	1/4½	1/0½
Kidderminster	1/4½	1/0½
King's Lynn	1/2½	11
Kirkham	1/5½	1/1½
Knowle	1/4½	1/0½
Lancaster	1/5½	1/1½
Leamington	1/5	1/0½
Leatherhead	1/4	1/-
Leeds	1/5½	1/1½
Leicester	1/5½	1/1½
Leighton Buzzard	1/2	10½
Letchworth	1/3½	11½
Lewes	1/2	10½
Lichfield	1/4½	1/0½
Lincoln	1/5½	1/1½
Littlehampton	1/2½	11
Liverpool	1/7‡	1/2½
Llandudno	1/4½	1/0½
Llanelly	1/5½	1/1½
London—		
12 m. radius	1/7*	1/2½
12-15 m. radius	1/6½*	1/2
Long Eaton	1/5½	1/1½
Longton	1/5½	1/1½
Loughborough	1/5½	1/1½
Louth	1/4	1/-
Lowestoft	1/3	11½
Luton	1/4	1/-
Macclesfield	1/5	1/0½
Maidenhead	1/4	1/-
Maidstone	1/3½	11½
Malvern	1/4	1/-
Manchester	1/5½	1/1½
Manningtree	1/2	10½
Mansfield	1/5½	1/1½
March	1/2	10½
Margate	1/3	11½
Market Harborough	1/4	1/-
Matlock	1/4	1/-
Melton Constable	1/1	9½
Melton Mowbray	1/4½	1/0½
Merthyr Tydfil	1/5	1/0½
Middlesbrough	1/5½	1/1½
Middleton	1/5½	1/1½
Middlewich	1/4½	1/0½
Milford Haven	1/3½	11½
Morecambe	1/5½	1/1½
Morley	1/5½	1/1½
Mundesley	1/2	10½
Nantwich	1/4½	1/0½
Newark	1/4½	1/0½
Newbury	1/2½	11
Newcastle-on-Tyne	1/5½	1/1½
Newcastle-u.-Lyme	1/5½	1/1½
New Forest	1/2½	11
Newmarket	1/3	11½
Newport, Mon.	1/5½	1/1½
Newport Pagnell	1/2	10½
Northampton	1/5	1/0½
Norwich	1/4½	1/0½
Nottingham	1/5½	1/1½
Nuneaton	1/5½	1/1½
Oakham	1/4	1/-
Oldham	1/5½	1/1½
Ormskirk	1/5½	1/1½
Oxford	1/4½	1/0½
Oxted	1/2½	11
Paignton	1/4½	1/0½
Peterborough	1/4½	1/0½
Plymouth	1/5½*	1/1½
Pontypridd	1/5	1/0½
Portsmouth	1/4	1/-
Port Talbot	1/5½	1/1½
Preston	1/5½	1/1½
Pulborough	1/2	10½
Ramsgate	1/3	11½
Reading	1/4½	1/0½
Redcar	1/5½	1/1½
Redditch	1/4½	1/0½
Redhill	1/3½	11½
Reigate	1/3½	11½
Retford	1/4	1/-
Ripon	1/4	1/-
Rochdale	1/5½	1/1½
Rochester	1/3½	11½
Rugby	1/5½	1/1½
Saffron Walden	1/2	10½
St. Albans	1/4½	1/0½
St. Helens	1/5½	1/1½
St. Neots	1/2½	11
Salisbury	1/2*	10½
Salisbury Plain	1/2½*	11
Sawbridgeworth	1/3½	11½
Saxmundham	1/1½	10½
Scarborough	1/5	1/0½
Selby	1/5½	1/1½
Sevenoaks	1/3½	11½
Sheerness	1/2½	11
Sheffield	1/5½	1/1½
Shipley	1/5½	1/1½
Shoeburyness	1/4½	1/0½
Shrewsbury	1/4½	1/0½
Sittingbourne	1/2	10½
Skegness	1/4	1/-
Sleaford	1/4	1/-
Slough	1/4	1/-
Southampton	1/4½	1/0½
Southend-on-Sea	1/4½	1/0½
Southport	1/5½	1/1½
South Shields	1/5½	1/1½
Spalding	1/3	11½
Stafford	1/4½	1/0½
Staines	1/4	1/-
Stamford	1/4	1/-
Stevenage	1/3½	11½
Stockport	1/5½	1/1½
Stockton-on-Tees	1/5½	1/1½
Stoke-on-Trent	1/5½	1/1½
Stourbridge	1/5	1/0½
Stourport	1/4½	1/0½
Stowmarket	1/2	10½
Stratford-on-Avon	1/4	1/-
Stroud	1/3½†	11½
Sunderland	1/5½	1/1½
Sutton Coldfield	1/5½	1/1½
Swaffham	1/1	9½
Swanage	1/3½*	11½
Swansea	1/5½	1/1½
Swindon	1/4*	1/-
Tamworth	1/5	1/0½
Taunton	1/3½	11½
Tenterden	1/2	10½
Tewkesbury	1/4*	1/-
Thetford	1/2	10½
Thorpe Bay	1/4½	1/0½
Todmorden	1/5½	1/1½
Tonbridge	1/3½	11½
Torquay	1/5	1/0½
Totnes	1/3½†	11½
Trowbridge	1/2½*	11
Truro	1/1½	10½
Tunbridge Wells	1/3½	11½
Uppingham	1/4	1/-
Uttoxeter	1/3½	11½
Wakefield	1/5½	1/1½
Walsall	1/5½	1/1½
Walsden	1/5½	1/1½
Walton-on-Naze	1/3½	11½
Ware	1/4	1/-
Warminster	1/2*	10½
Warrington	1/5½	1/1½
Warwick	1/5	1/0½
Wellingborough	1/4½	1/0½
Wells (Norfolk)	1/1	9½
Welwyn	1/3	11½
Welwyn Gar. City	1/4½	1/0½
West Bromwich	1/5½	1/1½
Westcliff-on-Sea	1/4½	1/0½
Weston-super-Mare	1/4½	1/0½
Weybridge	1/4	1/-
Weymouth	1/3*	11½
Whitby	1/4½	1/0½
Whitstable	1/2	10½
Widnes	1/5½	1/1½
Wigan	1/5½	1/1½
Wigton	1/4	1/-
Willington	1/5	1/0½
Wilmslow	1/5½	1/1½
Winchester	1/3	11½
Windermere	1/3½	11½
Windsor	1/4	1/-
Wisbech	1/2	10½
Witham	1/2½	11
Woking	1/3½	11½
Wokingham	1/3½	11½
Wolverhampton	1/5½	1/1½
Woodbridge	1/2	10½
Worcester	1/4½	1/0½
Workington	1/4	1/-
Worksop	1/4	1/-
Worthing	1/2½	11
Wrexham	1/5	1/0½
Wroxham	1/2½	11
Wycombe	1/4	1/-
Wymondham	1/1½	10½
Yeovil	1/3*	11½
York	1/5½	1/1½

* Painters, 1d. less than other Craftsmen. † Painters, ½d. less than other Craftsmen. ‡ Plasterers, 1s. 8d.

For Building Trade Wages in Scotland, see page 637.

NEW CINEMAS

DROITWICH.—Cinema Services, Ltd., 63, Temple-row, Birmingham, are shortly to proceed with the erection, on a site in Ombersley-street, of a new cinema to seat 660 persons. Tenders will be invited shortly. Plans are by Messrs. Satchwell and Roberts, 6, New-street, Birmingham, in conjunction with Messrs. Yates, Cook and Darbyshire, 43, Great Marlborough-street, W.1.

EDINBURGH.—A local syndicate is considering a development scheme on a site at Canal Basin, where it is proposed to erect a cinema to seat 2,500, a hotel, a garage, restaurant and shops. Plans will be prepared by Messrs. Lorimer and Matthew, F.R.I.B.A., 43, Minto-street, Edinburgh.

FULHAM.—The Borough Council has approved an application made by Messrs. Brewer, Smith & Brewer, architects, No. 11, The Green, Richmond, Surrey, for consent to proposed alterations and additions to the frontage of the Fulham Picture Palace, Nos. 260/262, North End-road, Fulham. The scheme is held up for the present.

HYDE.—Application for permission to submit plans to erect a cinema on a plot of land adjacent to Sandy-lane, Romiley, Hyde, has been received by the local authority from Mr. A. Winstanley, L.R.I.B.A., 53, Orchard-road, St. Annes-on-Sea, on behalf of Mr. E. N. Eaton, of Highfield, Urmston. Sketch plans are to be submitted.

KETTERING.—The Victoria Playhouse (Kettering), Ltd., are proposing structural alterations and additions to the "Victoria," Gold-street. The architects are Messrs. Gotch & Saunders, F.R.I.B.A., Bank Chambers.

LEEDS.—Contracts have been placed for the "Rex" cinema at Middleton, as follows:—Building work, Messrs. Pickard and Co., Dorrington-street, Leeds; steelwork, Messrs. Leonard Cooper, Ltd., Balm-street, Leeds; and reinforced concrete work, Messrs. John Cooke and Son, Ltd., Huddersfield. Plans are by Mr. James Brodie, A.R.I.B.A., 2, Lidgett-hill, Pudsey, Yorks. The owners are Messrs. Goldstone's (Cinemas), Ltd., 9, Wetherby-road, Leeds.

LIVERPOOL.—Mr. A. Ernest Shennan, F.R.I.B.A., 18, North John-street, Liverpool, has been appointed architect for the rebuilding of the Royal Court Theatre, Queen's-square, for the Robert Arthur Theatre Co., of Glasgow. The estimated cost is £40,000.

MARGATE.—Margate Estates, Ltd., propose to rebuild "Dreamland Park," Margate, to include a new cinema. Plans for the scheme have provisionally been approved by the Town Council. The cost is estimated at £100,000.

MONKS EATON, NORTHUMBERLAND.—Mr. A. Hallett, of Wrexham, N. Wales, is said to be associated with a scheme for the erection of a cinema at Monks Eaton. 916 seats will be provided. Mr. L. A. G. Prichard, A.R.I.B.A., 57, Moorfields, Liverpool, is architect.

MUSWELL HILL. — The Summerlands cinema, Muswell-hill-road, N.10, is to be reconstructed and enlarged, including new café, organ, car park, etc. Definite plans have not yet been adopted. The proprietors are the Home Counties Theatres, Ltd., 126, Maida-vale, N.W.

ROTHERHAM.—Messrs. Woffenden & Barker, Tivoli Cinema, Masbro'-street, are proposing minor extensions to the "Cinema House." The contractors are Messrs. Chadwick & Co. (Rotherham), Ltd., College-road, Rotherham.

SKELMANTHORPE.—Mr. J. Ainley, architect, 25, Market-street, is preparing plans for the Skelmanthorpe Premier Pictures Cinema in Commercial-road. Contracts are not let.

SUNDERLAND.—The T.C. has decided to sell 1,614 square yards of land at the junction of Ryhope-road and Queen Alexandra-road to Mr. G. F. Hill, of Cleadon, South Shields, for the erection of a new cinema, with accommodation for 1,250.

CONTRACTS, COMPETITIONS, &c.

For some contracts still open, but not included in this List, see previous issue. Those with an asterisk are advertised in this number. Certain conditions beyond those given in the following information are imposed in some cases, such as that advertisers do not bind themselves to accept the lowest or any tender, that a fair wages clause shall be observed, that no allowance will be made for tenders; and that deposits are returned on receipt of a bona-fide tender unless stated to the contrary.

The date given is the latest date when the tender, or the names of those willing to submit tenders, may be sent in, the name and address at the end is the person from whom or place where quantities, forms of tender, etc., may be obtained.

Following is a list of abbreviations:—Borough Surveyor, B.S.; Borough Engineer, B.E.; District Surveyor, D.S.; Town Clerk, T.C.; County Engineer, C.E.; County Surveyor, C.S.; Surveyor, S.; Engineer, E.

BUILDING, PAINTING, ELECTRIC LIGHTING, HEATING, etc.

OCTOBER 23.

Aldeburgh. — Fire Station. — For T.C. P. R. Bradley, B.S.

Balmedie.—Houses.—20, and 21 new outbuildings, for Department of Agriculture for Scotland. R. Greig, secretary, York-buildings, Queen-st., Edinburgh, 2. Dep. £1 1s.

Belfast.—Fencing.—On Shaftesbury estate, for Corporation. City S.

Cork.—Improvements.—Removing and refixing public fountain, Marino-lane, Bantry; repairs to 11 cottages in Dunmanway district; and repairs to 21 cottages in Skibbereen district, for Western Committee of Cork County Board of Public Health. W. H. Spiller, secretary.

Cork.—Cottages.—1 labourer's cottage at Inchafune, Dunmanway, and 1 labourer's cottage at Lathertidaly, Skibbereen, for Western Committee of Cork County Board of Public Health. J. J. O'Crowley, A.I.A.A., Clonakilty. Dep. £2 each.

Ellon.—Cottages.—12 semi-detached, for T.C. E. L. Williamson, architect, 154, Union-st., Aberdeen.

Grimsby.—Repainting.—12 houses, Pelham-rd., Immingham; 8 houses, Tetney-rd., Humberstone; and 4 houses, Riby-rd., Stallingborough, for R.D.C. J. B. Wikeley, E. and S.

Halifax.—Maisonettes.—Blocks "A," "C" and "D" on King's Cross-st. development, for C.B. D. T. Lloyd Jones, B.E., Crossley-st. Dep. £2 2s.

Hendon.—Houses.—138, on Reets Farm, West Hendon, N.W.9, for T.C. A. O. Knight, B.E. Dep. £5 5s.

Laoighis.—Hospital.—Demolition of existing hospital building at Abbeyleix, County Laoighis, clearing site, and erection thereon of new fever hospital, gate lodge, mortuary, water tower, boundary walls, etc., for Laoighis Board of Health and Public Assistance. P. J. Sheehan, architect, 47, O'Connell-st., Limerick. Dep. £15 15s.

Laoighis.—Installation.—Of electric lighting, etc., new fever hospital, Abbeyleix, for Laoighis Board of Health and Public Assistance. P. J. Sheehan, architect, 47, O'Connell-st., Limerick. Dep. £10.

Laoighis.—Heating.—Installation of heating, hot water and steam services, provision and erection of laundry and kitchen plant, etc., in new fever hospital, Abbeyleix, for Laoighis Board of Health and Public Assistance. P. J. Sheehan, architect, 47, O'Connell-st., Limerick. Dep. £10.

Linhouse.—Reconstruction.—Of 2 cottages at Linhouse, Mid Calder, for E. A. Collier. Parker & Moultrie, architects, 108, George-st., Edinburgh, 2

London.—Dwellings.—At 23-27, Old Gravel-lane, and 31, Church-row, for Stepney B.C. B. J. Belsher, F.R.I.B.A., B.E. and S. Dep. £3.

Macclesfield.—Houses.—28, in Woodford-rd., Poynton-with-Worth, for R.D.C. J. H. Walters, architect, Moody-chmbrs., Moody-st., Congleton. Dep. £2 2s.

Penarth. — Conveniences. — In Albert-rd., for U.D.C. E. I. Evans, S. Dep. £2 2s.

Poole.—Tenements.—At Market-st. and Queen-st., for Corporation. Borough Engineer, Municipal Offices, Park Gates East. Dep. £3 3s. (by cheque).

Willesden.—Decoration.—External and internal decoration of approximately 284 houses and flats on Council's housing estates, for U.D.C. F. Wilkinson, E.

OCTOBER 24.

Aberdeenshire.—Houses.—Cuminestown, 4; New Byth, 4; and Garmond, 2, for C.C. W. L. Duncan, architect, Turriff.

Ballagh.—Public elementary school at Ballagh, County Fermanagh (near Newtownbutler), for Very Rev. Thomas O'Doherty, P.P., Newtownbutler. J. Donnelly, architect, Enniskillen. Dep. £2 2s.

Biggleswade.—Wiring.—For electricity 10 houses at Barford-rd., Blunham, for R.D.C. J. Owen Jones, S., 192, Drove-rd. Dep. £1 1s.

Ealing.—Extensions.—Public library at Greenford and extensions to Hanwell public library, for T.C. W. R. Hicks, B.E. Dep. £2 2s.

Horsham.—Cottages.—6 pairs of cottages at Reeds-lane, Southwater, for R.D.C. V. Bartrim, building surveyor, 42, Albion-terr. Dep. £1 1s.

Hull.—Shed.—At Cleveland-st., for T.C. D. Harvey, A.R.I.B.A., City Architect. Dep. £1 1s.

Leeds.—Houses.—On York and Selby-rd. housing estate, for T.C. J. E. Acfield, City E.

Royston.—Installation of electric light at new senior school and caretaker's house, for West Riding C.C. Education Officer, County Hall, Wakefield.

Rugby.—Convenience.—In car park, North-st., for T.C. B.S. Dep. £1 1s.

Walsall.—Offices.—New offices and arcade, Park-st., for C.B. J. Taylor, B.E. and S. Dep. £3 3s.

Yiewsley and West Drayton. — Depot.—Council depot and two cottages at West Drayton, for U.D.C. W. T. Morgan, E. and S. Dep. £2 2s.

OCTOBER 25.

Bangor.—Painting.—Also repairs to Bangor police station, for Caernarvonshire C.C. D. G. Jones, clerk, Standing Committee, County Offices, Caernarvon.

Edinburgh.—Depot.—Alterations to form new store at depot, lighting and cleansing depot, King's Stables-rd., for T.C. E. J. MacRae, A.R.I.B.A., City Architect.

Hatfield.—Houses.—8, in parish of Essendon, for R.D.C. John R. Howarth, S., 16, St. Albans-rd. Dep. £2 2s.

Kirkburton.—Houses.—12 scullery type at "Turnshaws," for U.D.C. G. Barr, architect, Manor Lodge, Flockton. Dep. £2 2s.

London.—Convenience.—Above-ground convenience and electricity transformer sub-station in Ridley-rd., E.8, for Hackney B.C. P. Holt, B.E. and S. Dep. £1 1s. each.

Merton and Morden.—Painting.—Also decorating interior of 48 houses, Claremont-av., and alterations to hot water apparatus at number of Council's houses, Whatley estate, for U.D.C. G. Jerram, A.M.I.C.E., E. and S.

Portsmouth. — Fencing. — Galvanised corrugated sheet steel fencing and mild steel standards, etc., at Farlington sewage works, for Corporation. City E. Dep. £1 1s.

Portsmouth.—Repairs.—To ferro-concrete chimney, St. Mary's Institution, for T.C. City E. Dep. £1 1s.

Portsmouth.—Lighting.—Dismantling of electric lighting system at Carnegie Library and for installation of new lighting system at Fratton-rd. Library, for Corporation. City E. Dep. £1 1s.

Repton.—Houses.—6 pairs of non-parlour, three-bedroom type in parish of Mickleover, for R.D.C. R. S. Litherland, L.R.I.B.A., 10, High-st., Burton-on-Trent. Dep. £1 1s.

Rhydyclafdy.—Repairs.—At Tynlon, on Madryn estate, for Caernarvonshire C.C. County Architect, Caernarvon.

Walsingham.—Houses.—4, at Helhoughton, near Fakenham, for R.D.C. W. H. Moffatt, E. and S. Dep. £2 2s.

OCTOBER 26.

Chertsey.—Restoration Work.—At Town Hall, for U.D.C. W. V. Davies, E. and S.

Douglas (I. of M.).—Extensions.—To Manx Museum and Art Gallery, for Manx Government Property Trustees. Lomas & Barrett, architects and surveyors, Martins Bank-chams. Dep. £2 2s.

Plymouth.—Rebuilding.—Part of Derry's Clock, for T.C. City Architect, Rowe-st.

Plympton St. Mary.—Houses.—8, at Brixton, for R.D.C. E. Dep. £2 2s.

Wednesbury.—Houses.—100 non-parlour type, for T.C. A. Booth, B.E. and S. Dep. £2 2s.

OCTOBER 27.

Carlisle.—Building.—3 transformer stations at St. Aidan's-rd., Brampton-rd., Newby West, for T.C. P. Dalton, A.R.I.B.A., City E. and S., 18, Fisher-st.

Clun.—Houses.—16 non-parlour type and site works, for R.D.C. H. A. Elliott, S. Dep. £2 2s.

Dumfries.—Painting.—At Janefield, Cresswell, and Balmoral Park housing schemes, for T.C. B.S.

Exeter.—Alterations.—Also additions at "E" div. police headquarters, 9, Mont-le-Grand, for Devon C.C. County Architect, 97, Heavitree-rd., Exeter.

Mottram-in-Longdendale.—Wall.—Concrete retaining wall for diversion of brook course and other works at Hodge Fold, Broadbottom, for U.D.C. S. Dep. £2 2s.

Southsea.—Alterations.—To branch post office, for H.M.O.W. Room 65D, Third Floor, H.M. Office of Works, London, S.W.1. Dep. £1.

OCTOBER 28.

Birkenhead.—Clinic.—Health Clinic, on land situate at junction of Albany-rd. and Bedford-av., for C.B. B. Robinson, B.E. and S. Dep. £1 1s.

Bristol.—Repairs.—At 30, Dean-st., Bedminster, for Corporation. City E., 63, Queen-sq., 1. Dep. £1 1s.

Campden.—Wiring.—24 houses at Wellington-rd., Morton-in-Marsh, for electric light, for R.D.C. E. H. Earp, architect, 48, Henley-st., Stratford-on-Avon.

Cardiff.—Church.—At Ely, for Right Reverend Lord Bishop of Llandaff, the Vicar and Churchwardens of parish of Ely. Thomas Roderick & Sons, architects. Dep. £3 3s.

Cockenzie and Port Seton.—Houses.—8 flatted two-apartment, 52 flatted three-apartment and 8 flatted four-apartment, all in blocks of 4, on site, Whin-pk., for T.C. J. M'Ara, architect, Cockenzie.

Dagenham.—Library.—Branch library, for U.D.C. E. and S. Dep. £2 2s.

Fareham.—Cottage.—Caretaker's cottage rear of Council's offices, Westbury Manor, for U.D.C. H. T. Privett, S.

Near Holmes Chapel.—Erection on Cranage Hall estate, 7 homes, 2 workrooms, school, staff residence and other buildings, together with main drains, roadways, etc., for new colony to accommodate 376 mental defectives, for Cheshire Joint Board for the Mentally Defective. T. Taliesin Rees & Richard Holt, F.R.I.B.A., 64, Rodney-st., Liverpool, 1. Dep. £5 5s.

OCTOBER 30.

London.—Chamber.—Mortuary refrigerating chamber, Manor-place, Paddington, W.2, for Paddington B.C. B.E. and S.

Nottingham.—Aviary.—In Arboretum, for T.C. T. Wallis Gordon, City E. and S. Dep. £1.

Southwick, near Brighton.—Erection of senior girls' school, for West Sussex C.C. Clerk, Town Hall. Dep. £2 2s.

OCTOBER 31.

Glasgow.—Installation.—Of hot water heating system and domestic hot water system in Southern distr.ct sorting office, Victoria-rd., for H.M.O.W. Engineer, H.M. Office of Works, 122, George-st., Edinburgh, 2. Dep. £1 1s.

Hurworth.—School.—Erection of Hurworth New Council school, for Durham C.C. F. Willey, architect, 34, Old Elvet, Durham.

Johnstone.—Hospital.—Maternity hospital at Thornhill, for Renfrewshire C.C. J. C. Fraser, Clerk to Committee, County Buildings, Paisley.

Liverpool.—Alterations.—To boiler house, Mill-rd. Infirmary, for Corporation. Land Steward and Surveyor.

Manchester.—Sub-station.—In North-st., Cheetham, for Corporation. H. C. Lamb, Chief Engineer and Manager, Electricity Department. Dep. £1 1s.

North Hetton.—Alterations.—At Council school, for Durham C.C. F. Willey, architect, 34, Old Elvet, Durham.

West Riding.—Building.—Wooden shelters, laying of asphalt paths and wiring for electric lighting at Middleton-in-Wharfedale Sanatorium, near Ilkley, for C.C. West Riding Architect, County Hall, Wakefield.

NOVEMBER 1.

Beckenham.—Lavatories.—High-st., for U.D.C. H. Storr Best, E. and S. Dep. £2.

Freebridge Lynn.—Cottages.—16, for R.D.C. W. Jarvis, architect, 5, Mangate-st., Swaffham. Dep. £1 1s.

Glasgow.—Building.—Central police mortuary, 184-194, Saltmarket, for Corporation. D. Stenhouse, T.C. Dep. £2 2s.

Grimsby.—Alterations.—Also additions to postal and engineering garage, for H.M.O.W. Room 65D, Third Floor, H.M. Office of Works, London, S.W.1. Dep. £1.

Minehead.—Extension.—To post-office, and new garage, for H.M.O.W. Room 65D, Third Floor, H.M. Office of Works, London, S.W.1. Dep. £1.

NOVEMBER 2.

Chelmsford.—Tower.—Steel framed, timber fire drill tower, for T.C. V. J. Willis, B.E. and S. Dep. £1 1s.

East Grinstead.—Houses.—On Sackville estate, Buckhurst Way, for U.D.C. Clerk, London-rd. Dep. £2 2s.

NOVEMBER 4.

Coulsdon.—Garage.—Double garage at Coulsdon, for Coulsdon and Purley U.D.C. S.

Glossop.—Extension.—To West End school, for T.C. G. Faulds, B.E. and S. Dep. £1 1s.

Kirkby-in-Ashfield.—Houses.—100 houses for aged persons on the Park site, Hartley-rd., for U.D.C. L. Dodsley, architect, Council Offices. Dep. £2 2s.

Richmond (Yorks).—Conveniences.—At Catterick Camp, for R.D.C. S., 36, Market-place. Dep. £1 1s.

NOVEMBER 6.

***Eastbourne.**—Erection of Postal Engineering Garage and Stores, for H.M.O.W. Room 65D, Third Floor, H.M. Office of Works, London, S.W.1. Dep. £1.

Gatehouse-of-Fleet. — Houses. — Demolition of buildings on building site, western corner of Digby-st. and Catherine-st., and erection of one block of two semi-detached bungalows of four apartments each, and one block of two semi-detached bungalows of three apartments each, on site, for T.C. R. Lillie, T.C.

Strood.—Offices.—On site acquired at Frindsbury Hill, near Rochester, for R.D.C. D. P. Terry, acting surveyor. Dep. £5 5s.

***Whitchurch (Salop).**—Erection of Telephone Repeater Station, for H.M.O.W. Room 65D, Third Floor, H.M. Office of Works, London, S.W.1. Dep. £1.

NOVEMBER 7.

Flint.—School.—New central school at Bryn Coch, Northop-rd., Flint, for Flintshire E.C. R. G. Whitley, County Architect, Mold. Dep. £5 5s.

***Hayes (Kent).**—Erection of "Hurstway" Telephone Exchange, for H.M.O.W. Room 65D, Third Floor, H.M. Office of Works, London, S.W.1. Dep. £1.

NOVEMBER 8.

***Alperton, Middx.**—Cottages.—At Perivale-lane, for Wembley U.D.C. Engineer and Surveyor, Council Offices. Dep. £5 5s.

South Cork.—Hospital.—New District Hospital at Youghal, for County Board of Public Assistance. B. O'Flynn, Board's architect, 60, South Mall, Cork. Dep. £10.

NOVEMBER 9.

***Ellesmere Port.**—Erection of Post Office for H.M.O.W. Room 65D, Third Floor, H.M. Office of Works, London, S.W.1. Dep. £1.

NOVEMBER 13.

Basford.—Repairs.—To 46, Main-st., Brinsley; and house, occupied by G. T. Rickers, Main-st., Jacksdale, for R.D.C. V. V. Yates, senior sanitary inspector.

Letterkenny.—Building.—Improvements and additional buildings, for Donegal District Mental Hospital, Letterkenny. C. V. MacLoughlin, architect, Main-st., Letterkenny, Donegal. Dep. £20.

Longford.—Repairs.—To exterior of Longford dispensary residence. May Brady, secretary, County Home.

NOVEMBER 14.

Pitsea. — New Senior School. — In Timberlog-lane, for Essex C.C. County Architect, County Hall, Chelmsford. Dep. £2 2s.

NOVEMBER 20.

Swansea.—Buildings.—Also internal furnishings, at Sir John Power Station, for C.B. Preece, Cardew & Rider, consulting engineers, 8-10, Queen Anne's-gate, Westminster, S.W.1. Dep. £5 5s.

NOVEMBER 25.

***Mill Hill, London, N.W.7.**—Erection of semi-permanent school and caretaker's bungalow at Hale-drive, for Hendon Corporation. Town Clerk, Dep. £4 4s.

NO DATE.

Bury.—Painting.—External of stables, etc., at Fernhill-yard, Paradise-st. and Hornby-st. property; and 1 to 9, Elton-sq., for Corporation. B.E.

Co. Durham.—School.—Methodist school at Hobson, near Burnopfield, Co. Durham. T. W. T. Richardson, F.R.I.B.A., architect and surveyor, 57, High-st., Stockton-on-Tees.

Kintore.—Houses.—Two blocks of houses, each for four tenants, for T.C. A. Marshall Mackenzie, Son & George, architects, 173a, Union-st., Aberdeen.

Machynlleth. — Building.—On site adjoining Forge-rd., for Machynlleth, Corris and District. Chas. F. Ellis, L.R.I.B.A., architect, Aberdovey.

Portsmouth.—Additions.—Also alterations to 2-4, Kingston-rd., Buckland, Portsmouth, and 95, Fawcett-rd., Southsea, for Timothy Whites (1928), Ltd. Construction Dept., 30, Chandos-st.

MATERIALS, etc.

OCTOBER 23.

Beckenham.—Paving.—Artificial stone paving, for U.D.C. H. Storr Best, S. Dep. £2.

Johannesburg.—Pig Iron.—For South African Railways and Harbours Administration. Dept. of Overseas Trade, 35, Old Queen-st., S.W.1. (G.Y. 12954.)

Slough.—Pipes.—3-in., 4-in. and 6-in. cast or spun iron pipes, for U.D.C. Water Engineer.

OCTOBER 25.

Cowes.—Cast-iron Pipes.—For U.D.C. J. W. Webster, Water E.

Richmond (Surrey).—Pipes.—67 tons of 9 in. dia. cast-iron pipes, for T.C. H. P. Williamson, M.C., Water Engineer and Manager, Hotham House, Heron-court. Dep. £2.

OCTOBER 28.

Northamptonshire.—Granite Chippings.—For C.C. E. A. Black, C.S., Northampton.

NOVEMBER 3.

Rugby.—Pipes.—Water pipes and specials, for R.D.C. S., Temple-st.

ENGINEERING, IRON AND STEEL.

OCTOBER 23.

Cardiff.—Bridge.—Under Raydr branch, near Ely Station, for G.W.R. F. R. E. Davis, secretary, Paddington Station, London, W.2. Dep. £2 2s.

Godalming.—Tanks.—Two sedimentation tanks and appurtenant works, for T.C. G. B. Hartfree, B.S. and E. Dep. £2 2s.

Willesden.—Widening.—Lowering and widening of Neasden-lane under bridge carrying L.M.S. Railway, Acton branch, for U.D.C. E. Dep. £5 5s.

OCTOBER 24.

Lough Allen.—Excavation.—(1) Excavating a channel at the entrance to Lough Allen and in the existing bed of the River Shannon below the lake, the amount to be dredged being approximately 255,000 cu. yds. of earth and 35,000 cu. yds. rock; (2) demolition of the existing and rebuilding new sluices at the outlet from the lake; (3) reconstruction of 3 small road bridges, for Irish Free State Electricity Supply Board. Patrick J. Dempsey, secretary, Electricity Supply Board, 60-62, Upper Mount-street, Dublin. Dep. £5 5s.

OCTOBER 25.

Belper.—Sewerage.—In part of parish of Milford, for R.D.C. C. J. Lomax & Son, chartered civil engineers, 37, Cross-st., Manchester. Dep. £5 5s.

OCTOBER 26.

Manchester.—Strengthening.—Of Abbey Hey-lane bridge over Ashton Canal (Stockport branch), Gorton, for Corporation. City E. Dep. £3 3s.

OCTOBER 27.

Newcastle-under-Lyme.—Sewerage.—For parish of Audley, for R.D.C. A. H. S. Waters, consulting engineer, 25, Temple-row, Birmingham, 2. Dep. £2 2s.

OCTOBER 30.

Cheshire.—Widening.—Also reconstruction of Henhull bridge and approaches carrying Burford-Nantwich rd. over Shropshire Union Canal, for C.C. G. E. Ashforth, C.S., The Castle, Chester. Dep. £2 2s.

Dumfries. — Water Supply. — Between Kirtlebridge and Breconbeds, for C.C. Warren & Partners, 94, Hope-st., Glasgow. Dep. £2 2s.

OCTOBER 31.

Cromer.—Groyne.—Timber and concrete groyne, for Protection Commissioners. J. C. Melliss & Co., engineers, 16, St. Helen's-place, London, E.C.3. Dep. £2 2s.

NOVEMBER 6.

Bideford.—Tank.—Covered-in service tank in mass concrete in Buckland-rd., together with usual fittings, chambers and cast-iron pipe connections to an existing distributing service, for T.C. Borough Surveyor and Water Works Engineer. Dep. £2 2s.

NOVEMBER 7.

Egypt.—Drainage.—For Fayum drainage scheme, for Director-General, Main Drainage Dept., Egyptian Government, 41, Tothill-st., S.W.1.

NOVEMBER 13.

Mouldsworth.—Mains.—Cast-iron pipes, 24-in. dia., for contract No. 2 of Mouldsworth to Ellesmere Port scheme for West Cheshire Water Board. G. H. Hill & Sons, civil engineers, 40, Kennedy-st., Manchester. Dep. £2 2s.

ROAD, SEWERAGE AND WATER WORKS.

OCTOBER 23.

Beckenham.—Making-up.—Of parts of Queen Anne-av., Durham-rd. and Stanhope-grove, for U.D.C. H. Storr Best, S. Dep. £2.

Beddington and Wallington.—Sewer.—Surface water sewerage, London-rd., Beddington-corner, for U.D.C. S. F. R. Carter, E. and S., 42, Woodcote-rd., Wallington. Dep. £2 2s.

Belfast.—Paving.—Certain new streets and back streets, for C.B. City Surveyor (Room 37), City Hall. Dep. £1 1s

Castleford.—Making-up.—Of Medley-st. and Cross Medley-st., for U.D.C. S. Dep. £3 3s.

Desborough.—Street Works.—In Dunkirk-av., for U.D.C. A. Harris, S. Dep. £1.

Hayes.—Sewer.—Contracts 55 and 56, for U.D.C. G. H. Connor, E. and S. Dep. £2 2s. each.

Ilford.—Making-up.—Of Clinton-cres. (part of), Gordon-rd. (part of), Grangeway-gardens, and Hickman-rd., for T.C. B.E. and S. Dep. £2 2s. each.

Peterfield.—Roads.—Resurfacing roads on Durford Wood building estate. Capt. Percy W. Seward, Weston, Petersfield.

St. Albans.—Making-up.—12 various streets, for T.C. F. T. Negus, City E. and S., 38, St. Peter's-rd. Dep. £1 1s. each.

Stockport.—Sewers.—Combined sewage and surface-water sewer in Barcicroft-rd., Burnage, Manchester, for C.B. Wm. F. Gardner, B.S.

Towyn.—Trenchwork.—For U.D.C. Sandford, Fawcett & Partners, consulting engineers, 53, Victoria-st., Westminster, S.W.1. Dep. £2 2s.

Tynemouth.—Main.—Laying and jointing about 9 miles of 18 in. trunk water main between Ewart Hill, Bedlington, and North Shields, for Corporation. J. W. McKerrow, Water Engineer and Manager, 5, Northumberland-sq., North Shields. Dep. £3 3s.

OCTOBER 24.

Billericay.—Sewers.—950 yds. of 9-in. and 2,000 yds. of 6-in. glazed stoneware sewers, manholes and incidental works for drainage of portion of village of Mountnessing, for R.D.C. H. B. Mayhew, S. Dep. £2 2s.

Hornchurch.—Making-up.—Of Minster-way, for U.D.C. F. Alderson, S.

Morecambe and Heysham.—Making-up.—Of 14 roads, for T.C. R. B. Savage, B.S. Dep. 10s. 6d. each.

OCTOBER 25.

Bexley.—Making-up.—Of Cyril-rd., Bexleyheath, Warwick-rd. (part of), Welling, Monkton-rd., Welling, Honiton-rd., Welling, and Exeter-rd., Welling, for U.D.C. G. A. Joy, S. Dep. £2 2s.

Havant and Waterloo.—Making-up.—Of Park-rd., South Hayling, Hayling Island, for U.D.C. W. L. Hibberd, E. Dep. £2 2s.

Merton and Morden.—Making-up.—Of Mossville-gardens, for U.D.C. G. Jerram, E. and S. Dep. £1.

Sunderland.—Roads.—Roads and sewers at Leechmere-rd. housing estate, for Corporation. B.E. Dep. £2 2s.

OCTOBER 26.

London. — Macadam. — Supply and laying of asphalt macadam, for Lambeth B.C. Osmond Cattlin, B.E.

OCTOBER 27.

Kingston-upon-Thames.—Road.—Clarence-st. reconstruction, and London-rd. and Kingston-hill resurfacing, for T.C. B.S. Dep. £2 2s.

OCTOBER 28.

Belper.—Extension.—Of sewers at Whatstandwell, for R.D.C. Elliott & Brown, chartered civil engineers, Burton Buildings, Parliament-st., Nottingham. Dep. £2 2s.

Gildersome and Drighlington.—Sewage.—718 lin yds. of earthenware pipe sewers and necessary manholes in Gildersome, and for additions to Drighlington sewage works, for U.D.C.s. T. Grayshon, S. to Drighlington. Dep. £2 2c.

Hertfordshire.—Making-up.—Of roadway and paths of Essex-rd., Boreham Wood, for C.C. A. E. Prescott, C.S., Hatfield.

Stevenage.—Sewers.—308 yds., Haycroft-rd. to Primrose-hill, and 328 yds., Church-lane, for U.D.C. R. A. Gandy, S. Dep. £2 2s.

OCTOBER 29.

Reigate.—Roads.—Development roads on Colesmead estate, Redhill, for T.C. G. G. Sanderson, B.S. Dep. £2 2s.

NOVEMBER 2.

Caterham and Warlingham.—Sewers.—290 lin. yds. of 6 in. dia. glazed stoneware sewers, complete with all appurtenant manholes, for U.D.C. E. and S. Dep. £2 2s.

Great Ouseburn.—Mains.—120 yds. of 2-in. and 3,800 yds. of 3-in. cast-iron water mains, together with necessary air valves, sluice valves and hydrants, for R.D.C. Silcock & Simpson, engineers, 10, Park-row, Leeds. Dep. £3.

Southend-on-Sea. — Making-up. — Of Braemar-cres., for C.B. R. H. Dyer, B.E. and S. Dep. £1.

NOVEMBER 3.

Rugby.—Mains.—Laying water mains at Bulkington, for R.D.C. S.

Public Appointments.

OCTOBER 25.

***Derbyshire.**—Architectural Assistant. For C.C. County Architect.

OCTOBER 28.

Luton.—General Foreman.—For Corporation. Town Clerk, 2, Upper George-st.

Luton.—Building Inspector.—For Corporation. Town Clerk, 2, Upper George-st.

NO DATE.

***Lindsey, Lincs.**—Quantity Surveying Assistant (temporary), for C.C. Architect, County Offices, Newland.

CURRENT & PROPOSED BUILDING WORK*

Abbreviations: T.C. for Town Council; U.D.C. for Urban District Council; R.D.C. for Rural District Council; E.C. for Education Committee; B.C. for Borough Council; P.C. for Parish Council; M.H. for Ministry of Health; M.T. for Ministry of Transport; C.B. for County Borough; B. of E. for Board of Education; M.W.B. for Metropolitan Water Board; Borough Surveyor, B.S.; Borough Engineer, B.E.; District Surveyor, D.S.; Clerk, C.; Town Clerk, T.C.; County Engineer, C.E.; County Surveyor, C.S.; Surveyor, S.; Engineer, E.

Ashton-under-Lyne.—E.C. propose school for 250 infants at Broadoak-lane, Smallshaw.

Barnes.—T.C. recommend plans:—additions to Mortlake Infants' School, Surrey C.C.; extension of factory premises, Chrysler Works, Mortlake-rd., W. E. Cross; club room, Victoria Inn, Temple Sheen, Vivians (Hounslow), Ltd.

Belfast.—Plans passed:—alterations and additions to Dominican College, Fortwilliam-pk.; additions to premises, Corporation-st., for N. Macnaughton & Sons, Ltd.

Billesden.—R.D.C. propose 72 houses.

Billingham-on-Tees.—Site acquired by Durham County E.C. for branch library. F. Willey, architect, 34, Old Elvet, Durham.—U.D.C. propose footbridge over Billingham Beck; pumping station, Haverton Hill; and pumping station, Clarence-st. J. J. Hill, S.

Bilston.—British Industrial Gasses, Ltd., 34, Victoria-st., S.W.1, propose factory, Loxdale estate. Plans by staff architect. Estimated cost £9,500.

Blackburn.—T.C. propose 52 houses, Trafford-st.

Blyth.—Council propose 125 new houses in connection with slum clearance scheme.

Blyth.—T.C. revised plan for bathing pool. L. Leeper, B.E.

Bolton.—Rev. Chronnell and Managers of St. Edmund's, Eastbourne-grove, propose extensions to schools for accommodation of 400 children.—Trustees of Methodist Church propose church off Lock-lane.

Boston.—Goole Tillage Co., Ltd., Goole, acquired site at Docks for factory.—Parochial Council of St. Hugh's Mission Church, Martin Dales, propose building church.

Bradford.—J. Needham, 29, Little-lane, architect for parochial hall, Ingleby-rd., for Parochial Council of St. Williams Church.

Bradford.—Land been bought and plans submitted and passed for development of 80 houses and shops situated in Leeds Old-rd., for S. Rhodes, 355, Leeds-rd.

Bromborough.—Rev. A. B. Campbell, of Church of Christ the King, proposes school and presbytery.

Bromley.—T.C. approved:—G. Coulter, Ltd., mission hall, Brook-lane.

Bromsgrove.—R.D.C. approved:—31 houses, Hollywood, H. Lewis; 15 houses, Hagley Bridge, Walter Bros.

Bury.—Lancashire P.A.C. propose additional accommodation and improvements at Jericho Institution. Estimated cost £2,270. County Architect, Stephen Wilkinson, F.R.I.B.A., 16, Ribblesdale-place, Preston.

Cannock.—U.D.C. approved:—60 houses, Belt-rd., Hednesford, A. J. Pace.

Cannock.—U.D.C. to prepare plans and estimates for maternity home and clinic at Hednesford.

Carlisle.—Kirkby Stephen Co.-op. Society to proceed with additions to premises. Tenders invited. Plans by C.W.S. Architects' Dept., 90, Westmorland-rd., Newcastle-on-Tyne.

Carlisle.—New bus station at Lowther-st., for Ribble Motor Services, Ltd., to be proceeded with. Tenders being invited. Plans by firm's own architect, Frenchwood, Preston.—Warwick Bridge Co-operative Society, Ltd., to erect warehouse adjoining store, Warwick Bridge. Tenders invited.

Caterham and Warlingham.—U.D.C. approved:—16 houses, Tillingdown-lane, T. W. Stuchberry.

Cheadle.—A. Glyn Sherwin, architect, prepared plans for 22 houses, Greenhill-lane, for J. Barber.

Chesterfield.—R.C. authorities propose to rebuild junior and infants' school.

Chesterfield.—Vicar, Rev. H. W. Schofield, and Parochial Council of St. Mary's, Pilsley, propose extensions to Church Institute and improvements of the church and school buildings.

Daresbury.—County Architect, The Castle, Chester, preparing plans for additions to School House.

Darnall.—Tenders invited for club premises at The Avenue, for Darnall Working Men's Club and Institute. Architects, A. Appleby & Sons, St. James-st., Sheffield.

Dewsbury.—C.B. approved:—G. A. Smith, 24 houses, Scout-hill.

Dewsbury.—Stead & Walshaw, architects, Market-st., Heckmondwike, prepared plans for church for Kiplin Hill Zion Methodists.

Droitwich.—A. Macer Wright, 23, Temple-row, Birmingham, architect for extensions to Norbury House, for Norbury House (Droitwich), Ltd.

Dublin.—Inquiry been held into application of Corporation for compulsory acquisition of about 36 acres at North Lotts for working-class dwellings.

Dungannon.—Site been selected for district hospital to cost £30,000.

Durham.—Governors of Durham School have under consideration scheme for extending science laboratories, at foot of Chapel Hill.

Ealing.—Plans passed by T.C.:—A. E. Murdoch, 47 houses, Rydal-crescent, Coniston and Thirlemere-avs.; Gompertz & Meinrath, Ltd., factory, Aintree-rd.; Gilford Motors, Ltd., factory, North Circular-rd.; Reine Des Cremes, Ltd., factory, Bilton-rd.; Davies & Knight, architects, 4 shops with flats over, The Broadway, Ruislip-rd.; Home Counties Builders, Ltd., 24 flats, Wordsworth-parade, Greenford-rd.; Perbil & Co., 42 houses, Bennetts and Middleton-avs. and Downing-drive; Hillingdon Estates Co., 105 houses, Devon-close; London and Provincial Building Co., Ltd., 96 houses, Greystoke estate; County Perfumery Co., factory, North Circular-rd.; Polak's Frutal Works, factory, Wadsworth-rd.; Burrell Radio, Ltd., factory, Bilton-rd.

Gravesend.—T.C. decided to purchase 35 acres of land at Chalk as site for houses.

Heywood.—Corporation's clearance scheme been accepted by M.H.

Heckmondwike.—Wakefield Diocese Authorities acquired site at Six-lane Ends for Sunday school.

Hinckley.—U.D.C. propose 270 houses.

Horbury.—U.D.C. to apply for sanction to £14,470 for housing scheme on Sunroyd Hill, and £5,500 for alterations at sewage disposal works.

Huddersfield.—Wakefield Diocese Authorities to acquire two sites on housing estates upon which to erect Sunday schools.

Ipswich.—R. & W. Paul, Ltd., Key-st., proposing offices at Key-st. and Salthouse-st. Johns & Slater, architects, 8, Lower Brook-st.

Jarrow-on-Tyne.—Slum clearance programme costing £373,455 been approved by T.C. and forwarded to M.H. for approval. Work includes over 990 houses.

Keighley.—R.D.C. approved:—lay-out, 32 houses, Main-rd., Eastburn, for executors of late John Teal.

Kettering.—F. A. Watts & Co., Ltd., 21-23, High-st., have acquired old Post Office building in Gold-st., which they propose to reconstruct for showroom and warehouse. Architects, Gotch and Saunders, F.R.I.B.A., Bank-cham.

Lanchester.—S. to R.D.C. to prepare plans and estimates for convenience at Bloemfontein.

Leeds.—Tenders being invited for adaptation of St. Phillip's Schools, Wellington-st., for Sheldons, Ltd. Messrs. A. & F. Mosleys, Ltd., architects, Wormald-row.

Leeds.—Watch Committee proposing provision of 5 fire brigade sub-stations, at £16,000 to £18,000.

Leicester.—Ayling & Castley, architects, 53, Victoria-st., London, S.W.1, preparing plans for abattoirs for Corporation.

Leyton.—T.C. approved: Bearmans, Ltd., alterations at 861, 863 and 865, High-rd., Leytonstone; Lauries Preserves, Ltd., alterations to premises, Goldsmith-rd.; United Dairies, Ltd., office building and residential flat over at Hainault-rd.

Limerick.—Tenders for development work in connection with Island Field housing scheme being invited by Corporation. It is intended to erect 375 four-roomed dwellings on site.

Lincoln.—E.C. propose infants' school for 320 children on St. Giles estate. S. C. Baggott, City S.

Liverpool.—Plans passed by Corporation: alteration to Lower Hospital, Mill-lane, Corporation; 10 houses Dingle-rd., and 4 houses South Hill-rd.. Corporation; alteration to licensed premises, 238, Great Homer-st., Peter Walker & Son (W. & B.), Ltd.; 19 houses, Sandy-lane, Swanside Estate Co.; ventilation and control station and offices, George's Dock-way, H. J. Rowse, for Mersey Tunnel Joint Committee; 3 houses and shops Queen's-drive, 3 houses and shops Broad Green-rd., and 2 houses and shops Rockville-rd., R. Owens & Son, for Barkhill Estates, Ltd.; large store building, Leeds-st., G. Platt & Sons, Ltd., for Mersey Tobacco Bonds, Ltd.; 30 houses Walton Hall-av., 10 houses Stopgate-lane, 75 houses Pirrie-rd., and 47 houses Torrisholme-rd., W. T. Clarke, for T. Percy; conversion into cinema of premises, Church-st. and Williamson-st., A. E. Shennan, for Capt. John Henry Haigh; 20 houses, Oakhill-rd., O. Williams and Sutcliffe, for Ernest Spencer; 14 houses, Crosby-green, and 26 houses off Crosby-green, James Bramwell, for Buckley & Barton; 18 bungalows, Melbreck-rd., W. Pecorini, for Melbreck Estates, Ltd.; additional store, at Paint Works, Ford-st., E. F. Blakeley & Co., for R. Davidson & Co.; 12 houses, Mill-lane, H. Merrick Blampton, for Moss Farm, 1933, Ltd.; timber factory, Marlton-st. and Pickup-st., A. Neville Holt, for Chas. E. Turnock; alteration and addition to Brewery, Johnson-st., H. E. Davies, for Bent's Brewery Co., Ltd.; 4 houses and shops, Dunbabin-rd., and 8 houses, Childwall Priory-rd., H. E. Davies & Son, for Pierce Williams; 4 houses Eaton-rd., and 10 houses Becontree-rd., A. E. Shennan, for R. Jones; new building, 56, Thomas-st., G. C. Beecham & Son, for J. Beecham; 15 houses Rathbone-rd., and 8 houses Sandown-park, W. T. Clark, for Henry Carr; parish hall, Stehle-st., F. Rimmington, for Rev. Y. Young; exhibition hall, East Lancashire-rd., A. E. Shennan and Albert Winstanley, for J.F. Syndicate, Ltd.

Liverpool.—Trustees of Methodist Church Connexion (Superintendent Minister, Rev. J. R. Irving) propose church hall at Fazackerley. Cost about £6,000. Architects, A. Brocklehurst & Co., F.R.I.B.A., Martins Bank-bldgs., 10, Norfolk-st., Manchester.

London (Camberwell).—B.E. and S. to decorate and repair Dulwich baths by direct labour at £276.

London (Fulham).—B.C. approved drainage plans:—Bierrum & Partners, new offices and stores additional, Rosebank Wharf, Stevenage-rd.; A. Reginald Ross, shops and flats over, 30, 32 and 34, Vanston-place.

London (Wandsworth).—B.C. approved leasing land with frontage in Tilehurst-rd. on Magdalen Park estate to E. Clarke and Sons for residences.—Council received M.H. approval to 73 flats and 6 shops on Cumbers-yard and North-st. areas.—Plans passed:—Clapham North, Gee, Walker and Slater, Ltd., blocks of flats, North-st., abutting on Charlotte-pl.; Putney, F. G. Minter, Ltd.—rebuilding hut form rooms at High School for Girls, east side, Putney Hill; C. F. Kearney, Ltd.—garages and estate office with flat over Roehampton-close, Roehampton-lane; Streatham—Dixon and Braddock—showroom, etc., rear of 72, Streatham High-rd.; Southfield—R. Dixon and Sons—factory, Kimber-rd.; Coleman and James—eight houses, adjoining 365, Wimbledon Park-rd.; Springfield—Wilson, Lovatt & Sons, Ltd.—344 maisonettes at Magdalen Park housing estate; Streatham—South Suburban Co-operative Society—alterations and additions at Brixton Dairy, Cowpers Row; A. W. Maxwell—ten houses and garages, junction of Valleyfield-rd. and Strathdale; C. R. Taylor—shops with flats over 69, 71, 73, Streatham High-rd.; C. Swain—blocks of flats at Southcroft-rd., opposite Ribblesdale-rd.; Harringtons—three blocks of flats at Wavertree Court, Streatham Hill; Tooting—Hodgsons' Kingston Brewery Co.—alterations at "Selkirk" p.h., Selkirk-rd.; Streatham—B. G. Utting—16 houses, Baldry-gardens.

Longbenton.—W. Bean, S. to U.D.C., prepared privy conversion scheme, at £14,246.

Lowestoft.—T.C. approved plans by B.S. for five additional rooms at Notley-rd. school at £5,800. Tenders to be invited.—Plans passed:—Rector, Churchwardens and Church Council of St. Margaret's Parish, church, Roman-rd.

Lowton.—Lancashire E.C. propose elementary school. County Architect, Stephen Wilkinson, F.R.I.B.A., 16, Ribblesdale-place, Preston.

Lytham St. Annes.—B.S. presented sketch plan of alternative scheme of foreshore improvements round open-air baths at St. Annes, showing boating pool, together with sea defence works north side of baths. Application to be made to M.H. for sanction to borrowing £15,000 for scheme.

Macclesfield.—F. M. Bonnaud, headmaster of Macclesfield School of Arts, promoting scheme for garden village at Lyme Green. Plans prepared for 140 semi-detached brick houses.

Macclesfield.—W. A. Forsythe, F.R.I.B.A., 12, Stratford-place, London, W.1, been appointed by School Development of Buildings Committee to report on plans by local architects for proposed junior and infants' school on Moss-lane estate.

Manchester.—Plans approved by T.C.: bowls and tennis pavilion to recreation ground, Mauldeth-rd. and Parsonage-rd., Withington, Parks Committee; 21 houses, Eccles-rd., Baguley, T. Pollock, 10, Framingham-rd., Baguley; 24 houses, Wyverton-rd. and White Moss-rd., Chorlton-cum-Hardy, W. Gaffney, 147, Edge-lane; additions to theatre, Great Western-st., Rusholme, Manchester, Repertory Theatre Co.; 242 houses, 9 shops and houses, and business premises, Hazelbottom and Woodlands-rds., Cheetham, J. Smithers, Heald Green; petrol filling station and house, Stone Pall-rd., Wythenshaw, C. Milk, Furness Garage.—Hospital Provident Association (Capt. T. Spencer, secretary) proposing hospital with accommodation for 200 beds, at £200,000. Architects, Charles Swain & Partners, Lloyds Bank-buildings, 53, King-st.—Catholic Authorities proposing church and schools between Clayton and Droylesden districts.

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* See also List of Contracts, Competitions, etc.

** **In these lists every care is taken to ensure that information given is accurate and up to date, but it may occasionally happen that, owing to building owners taking the responsibility of commencing work before plans are finally approved by the local authorities, "proposed" works at the time of publication have been actually commenced.**

Manchester.—Wilson's Brewery, Ltd., Newton Heath Brewery, Monsall-rd., proposes erection of "Royal Oak" hotel at Wythenshawe.—Threlfall's Brewery Co., Ltd., propose a new hotel on Nuthurst-rd. and Broadway, Moston.—Seymour Road Garage Co., Ltd., motor engineers, Seymour-rd., Crumpsall, propose petrol-filling station, showroom and 7 shops and houses on Bury Old-rd. and Seymour-rd., Crumpsall. Drury & Gomersall, architects, 11, Imperial-bldgs., Oxford-rd.—A. T. Fogarty & Co., builders, Tyson-st., Cheetham, propose 42 houses, Crescent-rd., Greenhill-rd., Woodlands-rd. and Humphries-st., Crumpsall.—J. Smithies, builder, Styal-rd., Heald Green, Cheadle, propose laying-out land off Hazel Bottom-rd. and Woodlands-rd., Cheetham, construction of roads and sewers for 242 houses, 9 shops and houses and business premises.—M.H. sanctioned loan of £23,520 for Royal Oak Schools, Wythenshawe.—E.C. propose permanent school to replace Wesley-st. temporary buildings.—Schofield & Thompson, 30, Hartley-st., Oldham, propose 36 houses on Abbey Hey-lane, Gorton. Plans by E. S. England, architect, 12, Clegg-st., Oldham.

Margate.—T.C. approved:—24 houses, Draper's-av., and house and garage, Canterbury-rd. N., T. Wing.

Middlesbrough.—Tenders not yet invited for convent in North Ormesby-rd. Plans by Archibald & Archibald, 21, Albert-rd.

Middleton.—B.E. approved plans for elementary school on Boarshaw, for T.C.

Morpeth.—Tenders invited for headmaster's house and alterations to King Edward Grammar School for Governors. Plans by G. Reavell, F.R.I.B.A., Lloyds Bank-chams., Alnwick.

Nevin (North Wales).—Parochial Council of the Parish Church propose church hall. Architect, T. G. ap Griffith, architect, Towyn, Merioneth.

Newbiggin.—Hetherington & Wilson, 52, Westgate-rd., Newcastle, prepared plans for reconstruction of "Old Ship" inn. No contracts placed.

Newburn-on-Tyne.—R. Alder Gofton & Sons, builders, 41, Uplands, Monkseaton, propose 12 pairs of houses, Benson's Building estate.

Newcastle-on-Tyne.—Messrs. Hoults, New Market-st., secured property at Newcastle, which is to be adapted. Percy L. Browne & Sons, Pearl-buildings, Northumberland-st., architects.

Newcastle-on-Tyne.—Plans for shops and offices in Collingwood-st., for Union Property Association, 21, Collingwood-st., have been drawn up by J. Oswald & Sons, 2, Worswick-st. No contracts settled.—Storey & Alderson, builders, Jesmond Dene-rd., to erect 24 houses, Jesmond Dene-rd., to plans by Cackett, Burns-Dick & McKellar, 21, Ellison-pl.—City Council sold further land to G. C. Haddon, Ltd., builders, Huddlestone-rd., Heaton, Newcastle, for development purposes. Land adjoins New Benwell cemetery.—Amended scheme and plans for premises for Brook Bond & Co. been approved. Site in Bentick-rd. Architect, W. F. Clarke, 9, Red Cross, Liverpool.

Newry.—Board of Guardians approved plans for fever hopital, nurses' home, etc., at £22,912.

Northumberland.—P.A.C. to remodel Berwick and Alnwick institutions and plans to be forwarded to M.H. W. W. Tasker, 17, Claremont-place, Newcastle, architect.

Oakham.—A. M. Kelham, A.R.I.B.A., 14, All Saints'-place, Stamford, prepared plans for 60 houses, Catmose estate.

Oakworth.—West Riding E.C. to ask B. of E. to sanction new school. H. Wormald, County Architect, Wakefield.

Oldham.—F. Thorpe, "The Haven," Crasscroft, preparing plans for reconstruction of school buildings, for authorities of Oldham Blue Coat School.—T.C. propose a fire station and houses on Primrose Heath.

Orford.—Rev. T. C. Allwork and Parochial Council of Parochial Church propose elementary schools. Cost, £10,000.

Padiham.—Another batch of houses is to be built by District Council on Abingdon-st. site. Latest scheme is for 16 houses of three-bedroom type at £4,480, and 12 of two-bedroom type at £3,000.

Petersfield.—Seely and Paget, architects, prepared plans for proposed public hall and municipal offices.

Pontefract.—Bentley's Yorkshire Brewery Co., Ltd., Eshaldwell Brewery, of Woodlesford, nr. Leeds, to carry out additions at "Woodman" Hotel at Horsefair. No contracts let.

Portsmouth.—T.C. approved:—Cook & Bamber, 16 houses, Second-av., Farlington.

Purfleet.—Council approved plans for abattoir.

Reading.—J. R. Greenaway, 11, Friar-st., been appointed quantity surveyor for second tuberculosis pavilion at Park Hospital.

Reading.—T.C. to reconstruct Factory Bridge, over River Kennet, at £42,000.

Ripon.—Scheme for 38 houses of non-parlour type being considered by R.D.C.

Salford.—F. Butterworth, Ltd., builders, Armour-place, Blackley, Manchester, proposing 104 houses, Bank-lane, off Bolton-rd., Irlam of th' Heights.

Salop.—C.C. propose casual wards at institution, Shawbury Heath, on Shrewsbury to Market Drayton-rd.

Sedgefield.—R.D.C. to approach M.H. with view to sanctioning more houses for aged people. J. Stones, S.

Sedgley.—District Council considering Housing Committee's proposed extension of Upper Gornal housing scheme, including £26,000 for dwellings.

Sheffield.—Corporation propose 3,000 houses on land between City-rd. and Hagley Park-rd. W. G. Davies, F.R.I.B.A., City Architect.

Sheffield.—T.C. approved: 10 houses, Ryegate-rd., F. Dennis; 10 houses, Harris-rd., G. E. Smith; 10 houses, Ridgeway-rd., A. J. Belton; 12 houses, 4 shops and 4 garages, High Storrs-drive and Falkland-rd., A. Shaw; 41 houses, new streets of Ecclesall-rd., J. H. S. Randall, Ltd.; 24 houses and 10 garages, Rivelin Valley-rd., and new road, J. Samuel; 24 houses, Evelyn-rd., J. E. Nadin & Son, Ltd.; 186 houses, Woodthorpe estate (Scheme 4), Estates Committee; 74 houses, Bannerdale-rd., Carterknowle-rd., Archer-lane and new road, A. Waddington & Son; 12 houses, Toftwood-rd., M. Silman; 6 houses and garages, Meersbrook Park-rd., Burcot-rd. and Brook-rd., W. A. Wright. Tenders invited for holiday home at Townhead-lane, Dore. Architects, Hadfield & Cawkwell, St. James-st.

Shipley.—U.D.C. propose 60 houses on Crag-rd. estate. Cost, £18,450.—U.D.C. propose alterations at Somerset House for clinic purposes. Cost, £725.

Southend.—Public Welfare Council's Housing Committee considering scheme for floating public utility company and for houses for working men, to be built by direct labour.

South Shields.—Henderson Bros., builders, Smith-st., Tyne Dock, contemplating 55 self-contained houses in Mortimer-rd., Banbury-ter. and Warwick-rd.; and 13 houses in flats in Morpeth-av.

Staincliffe.—T. Carr, Ltd., to erect warehouse at Highfield Mills. No contracts placed.

Staines.—Plans passed by U.D.C.: R. T. Jubb, lay-out of estate and 188 houses, Worple-rd., Staines; R. A. Platt, 15 houses, Adelaide and Marlborough-rds.; Village Hall Committee, village hall, Stanwell Village; F. W. Lewis, warehouse, 131, High-st.

Stanley.—U.D.C. to apply to M.H. for sanction to build another 250 houses at between £70,000 and £100,000.

Stapleford.—Catholic Authorities propose church and schools. Rev. D. Brennan, P.P.

Stranorlar.—Public inquiry held by inspector under Local Government and Public Health, into advisability of sanctioning £154,000 for labourers' cottages in County Donegal.

Sunderland.—T.C. adopted open-air swimming baths scheme at Seaburn to cost £25,000. T. P. Collinge, B.E.

Swansea.—C.B. approved purchase of land at Townhill, Sketty, near Hill House, by Syd Davies, for 104 houses. Council to obtain tenders for roads, etc.—Additional building to be erected at Trinity-place clinic at £400.—Plans passed:—Flats, Court-parade, Sketty, Estateways Builders, Ltd.; mission hall, Phillip-st., for Brethren; pavilion, Heol-las, Heol-las Park Rangers A.F.C.—Underground pumping station proposed at Langland Bay.

Tottenham.—U.D.C. arranging for accommodation of 140 persons now living in area scheduled for clearance in houses and flats to be built on Weir Hall estate, in the neighbouring district of Edmonton.

Tottington.—Lancashire E.C. propose central school.

Towcester.—U.D.C. propose 192 houses.

Tunstall.—C.E. authorities propose completion of St. Chad's Church.

Uxbridge.—U.D.C. approved:—Harefield-rd., Uxbridge, two blocks of four maisonettes and eight lock-up garages, Home Roofs, Ltd.

Wallsend.—T.C. has approved plans by J. A. Blench, B.E., for 14 houses of three-bedroomed type and 2 houses of parlour type in Station-rd. Cost, £6,375.—Newcastle Breweries, Ltd., Haymarket, Newcastle, to carry out alterations to "Anchor Inn," High-st. West. No contracts placed.—It is proposed to add two manual instruction rooms to St. Peter's School, at £1,400. Architect, C. S. Errington, 21, Grainger-st. West, Newcastle.

Wath.—R.D.C. to erect 40 houses.

Wirral.—U.D.C. proposing Council offices.

UNEMPLOYED OPERATIVES

A LONDON "CLEARING HOUSE."

A WORK of considerable importance to London building firms and to building departments of business concerns is being carried on at the London Building Trades Employment Exchange, 13-16, Tavistock-street, Covent Garden, W.C.2. Constituted originally as the general employment exchange for the Covent Garden area, there was inaugurated some years ago—with the authority and blessing of the Ministry of Labour—a special department for compiling a roll of unemployed London building trade operatives.

Some brief details of this Exchange and the manner in which it is operated are of interest. It is open to every unemployed operative in the area—no matter at which Exchange he is registered for the purpose of benefit—to make application to Tavistock-street to be placed on their roll. The branch of the Exchange in question is under the control of a manager and four technical assistants, men experienced in various branches of the building trade. It is this system of control that makes this Exchange unique. Every operative who is placed on the roll must satisfy the authorities that he is a *bona-fide* and skilled worker. On being placed on the roll, the particular branch of his trade is noted. The particular value of this becomes clear when an inquiry for a man is received. The vacancy can be filled immediately with a man who is both expert and experienced in the particular branch of work required.

The Exchange is directed under the auspices of an honorary board composed of eight members of the London Master Builders' Association and eight members of the National Federation of Building Trades Operatives. The first chairman, the late Viscount Burnham, is now to be succeeded by Mr. Ernest J. Brown, who retired recently from the Directorship of the L.M.B.A.—a choice that will give considerable satisfaction in view of Mr. Brown's lifelong connection with, and interest in, the building trade.

Tavistock-street Exchange is, therefore, a most useful bureau for the builder and his foremen. The premises contain a large waiting room for the operatives, and an urgent telephone call for one or a dozen skilled men can be instantly answered. This is an advantage which needs no stressing, the more especially as only men fitted for the job required are sent.

"Tavistock-street" is now known to a high proportion of London contractors and their foremen as a bureau of real service. In 1932 over 7,000 men were supplied to jobs at a moment's notice. It is the aim of the Exchange to extend the service they offer to every London firm. To this end they ask that firms and foremen should make a note that, by ringing the Exchange (manager, Mr. S. T. Cooke; Temple Bar 6336), their requirements can be filled without delay.

Shorter Working Week.

Messrs. Pilkington Brothers, Ltd., glass manufacturers, announce that a reduction of hours of work is to be made at their St. Helens works as well as that made at their Doncaster works. For an experimental period of six months the normal working hours of all the firm's employees at St. Helens, except for isolated cases, will be 42½ instead of 46½ for day workers, and 42 instead of 45 or 48 hours for shift workers. The glassworkers have recently been subject to a reduction of wages under the firm's cost-of-living agreement, but, apart from this, the weekly rates of process workers will be approximately the same for the shorter hours as they were for the longer. The new arrangements have been made in consultation with the various trade unions concerned without prejudice to other details covered by existing arrangements, the firm reserving the right to revert to the old working hours, rates and conditions at the end of six months. About 3,000 workpeople are concerned at St. Helens and 1,200 at Doncaster.

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Per 1,000. Delivered at London Goods Stations.

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"Phorpres"	2 11 3	Flettons, B'll'n'se	3 6 3
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Best White Ivory and Salt Glazed Stretcher	21 0 0	D'ble Str'tch'rs	20 10 0
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Headers	20 10 0	One side and two Ends	30 10 0
Quoins, Bullnose and 4½ in. Flats	27 10 0	Two sides and one End	31 10 0
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2½ " "	1 8	4" " "	2 4

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Thames Ballast	6 6	per yd.
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Sawn two sides	22 6
Sawn, three or four sides	27 6
CHILMARK—RANDOM BLOCK—	
At Nine Elms, per ft. cube	3 11
YORK STONE, BLUE—*Robin Hood Quality.*	
Delivered at any Goods Station London.	
6 in. sawn two sides landings to sizes (under 30 ft. super) Per ft. super	5 6
6 in. rubbed two sides, ditto "	6 0
3 in. sawn two sides slabs (random sizes), "	2 3½
2 in. to 2½ in. sawn one side slabs (random sizes) "	1 6½
1½ in. to 2 in. ditto "	1 3½
HARD YORK—	
Delivered at any Goods Station, London.	
Scappled random blocks Per ft. cube	6 3
6 in. sawn two sides landing to sizes (under 40 ft. super) Per ft. super	5 1½
6 in. rubbed two sides, ditto "	6 1½
4 in. sawn two sides slabs (random sizes) "	3 1½
3 in. ditto ditto "	2 8
2 in. self-faced random flags Per yd. super	8 0

CAST STONE.

Delivered in London area in full van loads, per ft. cube: Plain, 8s. 6d.; Moulded, 9s. 6d.; Cills 10s. 0d.

SOFT WOOD.

GOOD BUILDING DEAL.

Inches.	Per stan.	Inches.	Per stan.
4 × 11	£23 10	3 × 6	£17 10
4 × 9	22 10	3 × 11	19 10
4 × 8	21 0	2 × 11	19 10
4 × 7	19 0	3 × 9	19 10
3 × 8	18 0	2½ × 9	19 10
3 × 7	18 0	3 × 4½	17 10
2½ × 7	18 0	3 × 4	17 10

PLANED BOARDS.

1 × 11	£22 10	1 × 9	£21 0

PLAIN EDGE FLOORING.

Inches.	per sq.	Inches.	per s.
⅜	16/-	1¼	25/-
½	17/-	1½	27/6
1	20/-		

TONGUED AND GROOVED FLOORING.

Inches.	per sq.
1	21/-
1¼	26/-
1½	27/6

MATCHING (BEST).

Inches.	per sq.
⅜	16/-
½	18/6
1	22/6

	s. d.
BATTENS.	
⅜ × 2 ... per 100 ft.	2 6
SAWN LATHS. Per bundle	2 3

HARD WOOD.

1 INCH AND UP THICK.

	£ s. d.
Average price for prime quality.	
Dry Austrian Wainscot, per ft. cube	0 15 0
Dry American and/or Japanese Figured Oak, per ft. cube	0 12 0
Dry American and/or Japanese plain Oak, per ft. cube	0 10 0
Dry sq. edged Honduras Mahogany, per ft. cube	0 14 0
Dry log-cut Honduras Mahogany, per ft. cube	0 16 0
Dry Cuba Mahogany, per ft. cube	1 1 0
Dry Teak, per ft. cube	0 14 0
Dry American Whitewood, per ft. cube	0 10 0
Best Scotch Glue, per cwt.	3 0 0
Liquid Glue, per cwt.	4 7 0 to 5 10 0

SLATES.

First quality slates from Bangor or Portmadoc, carriage paid in full truck loads to London Rate Station. Per 1,000 actual.

	£ s. d.		£ s. d.
24 by 12	29 15 0	18 by 10	15 12 6
22 by 12	25 0 0	18 by 9	13 15 0
22 by 11	22 10 0	16 by 10	13 10 0
20 by 12	22 0 0	16 by 8	10 7 6
20 by 10	19 7 6		

TILES.

Delivered at London rate stations in full truck loads of not less than 6 tons. Per 1,000 f.o.r. London.

Best machine-made tiles from Broseley or Staffordshire district	£4 7 0
ditto hand-made ditto	5 0 0
Ornamental ditto	5 8 6
Hip and valley tiles (per dozen) Hand-made	0 9 6
Hip and valley tiles (per dozen) Machine-made	0 9 0

METALS.

JOISTS, GIRDERS, &c., TO LONDON STATION, PER TON—

R.S. Joists, cut and fitted	£11 0 0
Plain Compound Girders	12 0 0
" Stanchions	15 0 0
In Roof Work	18 0 0

MILD STEEL ROUNDS.—To London Station, per ton.

Diameter.	£ s. d.	Diameter.	£ s. d.
¼ in.	12 0 0	⅝ in. to ¼ in.	10 15 0
⅜ in.	11 0 0	⅝ in. to 2½ in.	10 10 0

WROUGHT-IRON TUBES AND FITTINGS—

(Discount off List for lot of not less than £7 net value delivered direct from Works, 2½ per cent. less above gross discounts, carriage forward, if sent from London Stocks.)

	Standard Wrot. Mild Steel Tubes and Tubulars Sizes ⅛ in. to 6 in.	Genuine Wrot. (Puddled) Iron Tubes and Tubulars Sizes ⅛ in. to 6 in.	Standard Fittings Sizes ⅛ in. to 6 in.	Standard Flanges Sizes ⅛ in. to 6 in.
	%	%	%	%
Gas	65	52½	57½	70
Water	61½	48½	52½	65
Steam	57½	45	47½	60
Galv. gas	52½	40	47½	60
Galv. water	47½	35	42½	55
Galv. steam	42½	30	37½	50

C.I. HALF-ROUND GUTTERS—London Price ex Works

Per yd. in 6 ft. lengths.	Gutters.	Angles and Nozzles.	Stop Ends.
3 in.	1/4	1/0	4½d.
3½ in.	1/5	1/1½	5d.
4 in.	1/5	1/2½	6d.
4½ in.	1/6	1/4½	8½d.
5 in.	1/9	1/6½	9d.

O.G. GUTTERS.

3 in.	1/6	1/4	6½d.
3½ in.	1/8	1/4	7d.
4 in.	1/9	1/4½	7½d.
4½ in.	1/10	1/7½	8½d.
5 in.	2/2	1/10½	10½d.

RAIN WATER PIPES, &c.

Per yd. in 6 fts.	Pipe.	Bends, angles, stock	Branches, stock angles
2 in.	2/0	1/2½	1/9½
2½ in.	2/1	1/4½	2/2
3 in.	2/7	1/9	2/7½
3½ in.	3/0	2/1½	3/0½
4 in.	3/5	2/6	3/8½

Less 20 per cent. trade discount.

Tonnage allowance—4 ton lots, 5 per cent. 2 ton lots, 2½ per cent.

L.C.C. COATED SOIL PIPES—London Prices ex Stock.

	Pipe, stock angles.	Bends, stock angles.	Branches, stock angles.
	s. d.	s. d.	s. d.
2 in. per yd. in 6 fts.	2 5	1 9	2 1½
2½ in. "	2 9½	1 11	2 7½
3 in. "	3 0	2 1½	3 1½
3½ in. "	3 2½	2 7½	3 8
4 in. "	3 8	2 11½	4 2½

L.C.C. COATED DRAIN PIPES—London Prices ex Stock.

	Pipe, stock angles.	Bends, stock angles.	Branches, stock angles.
	s. d.	s. d.	s. d.
3 in. per yd. in 9 ft. lengths	3 0	4 6	7 0
cwt. qr. lbs.			
4 in. " 1 1 20	4 9	5 6	8 9
5 in. " 1 2 22	5 10	9 6	13 6
6 in. " 2 0 6	6 10	12 0	18 0

Gaskin for jointing 41/- per cwt.

IRON—	Per ton in London. £ s. d.		£ s. d.
Common bars	10 0 0	to	10 10 0
Staffordshire Crown Bars—			
Good merchant quality	10 10 0	to	11 0 0
Staffordshire Marked Bars	14 0 0		15 0 0
Mild Steel Bars	9 0 0		10 0 0
Steel Bars, Ferro-Concrete quality, basis price	8 0 0		9 0 0
Hoop iron, basis price	11 0 0		12 0 0
Galvanised	27 0 0		28 0 0
Soft Steel Sheets, Black—			
Ordinary sizes, to 20 g	11 0 0		11 10 0
" " " 24 g.	12 0 0		13 0 0
" " " 26 g.	14 0 0		15 0 0
Sheets Flat Best Soft Steel, C.R. and C.A. quality—			
Ordinary sizes, 6 ft. by 2 ft. to 3 ft. to 20 g.	13 0		14 0 0
Ordinary sizes, 6 ft. by 2 ft. to 3 ft. to 22 g. and 24 g.	14 0		15 0 0
Ordinary sizes, 6 ft. by 2 ft. to 3 ft. to 26 g.	17 0		18 0 0

No. 1 quality £4 per ton extra.

Flat and Galvanised Corrugated Sheets—			
Ordinary sizes, 6 ft. to 9 ft. to 20 g.	13 0 0		14 0 0
Ordinary sizes, 6 ft. to 9 ft. to 22 g. and 24 g.	14 10 0		15 10 0
Ordinary sizes, 6 ft. to 9 ft. to 26 g.	16 0		17 0 0
Sheets, Galvanised Flat, Best quality—			
Best Soft Steel Sheets, 6 ft. by 2 ft. to 3 ft. to 20 g. and thicker	16 10 0		17 10 0
Best Soft Steel Sheets, 22 g. and 24 g.	18 10 0		20 10 0
Best Soft Steel Sheets, 26 g.	20 0 0		21 10 0
Cut Nails, 3 in. to 6 in.	15 0 0		16 0 0

(Under 3 in. usual trade extras.)

METAL WINDOWS.—Standard sizes, suitable for complete houses, including all fittings, painting two coats, and delivery to job, average price about 1s. 4d. to 1s. 7d. per foot super.

COPPER.

		s. d.
Seamless Copper tubes (basis)	per lb.	0 9
Strong sheet	"	0 10
Thin	"	0 11
Copper nails	"	1 0
Copper wire	"	0 11

PLUMBERS' BRASS WORK.

Delivered in London

NEW RIVER PATTERN SCREW DOWN BIB COCKS FOR IRON.

½ in.	¾ in.	1 in.	1¼ in.	1½ in.	2 in.	
29/-	45/-	76/-	153/-	246/-	510/-	per doz.

NEW RIVER PATTERN SCREW DOWN STOP COCKS AND UNIONS.

½ in.	¾ in.	1 in.	1¼ in.	1½ in.	2 in.	
41/6	62/-	92/-	174/-	300/-	588/-	per doz.

* The information given on this page has been specially compiled for THE BUILDER, and is copyright. The aim in this list is to give, as far as possible, the *average* prices of materials, not necessarily the highest or lowest. Quality and quantity obviously affect prices—a fact which should be remembered by those who make use of this information.

PRICES CURRENT OF MATERIALS—*(contd).*

RIVER PATTERN SCREW DOWN MAIN FERRULES.

½ in. ¾ in. 1 in.
39/- 60/- 116/6 per doz.

CAPS AND SCREWS.

1¼ in. 1½ in. 2 in. 3 in. 3½ in. 4 in.
7/6 10/- 14/- 23/- 30/- 42/- per doz.

DOUBLE NUT BOILER SCREWS.

½ in. ¾ in. 1 in. 1½ in. 1½ in. 2 in.
7/6 11/- 17/- 29/- 36/- 63/- per doz.

BRASS SLEEVES.

1¼ in. 2 in. 3 in. 3½ in. 4 in.
10/- 12/- 20/- 24/- 31/- per doz.

NEW RIVER PATTERN CROYDON BALL VALVES S.F.

½ in. ¾ in. 1 in. 1½ in. 1½ in.
35/- 56/- 98/- 162/- 228/- per doz.

DRAWN LEAD P. & S. TRAPS WITH GRASS CLEANING SCREW.

1¼ in. 1½ in. 2 in. 3 in.
8 lbs. P. traps ..... 33/- 41/- 56/- 101/- per doz.
8 lbs. S. traps ..... 35/- 45/- 66/- 126/- ,,

TIN.—English Ingots, 2/1 per l . SOLDER—Plumber, 11d., Tinmen's, 1s., Blowpipe, 1/1 per lb.

LEAD, &c.

(Delivered in London.)	£	s.	d.
LEAD—Sheet, English, 4 lb. and up	21	0	0
Pipe in coils	18	0	0
Soil pipe	25	0	0
Compo pipe	25	10	0

NOTE.—Country delivery, 20s. per ton extra; lots under 3 cwt. 4s. per cwt. extra, and over 3 cwt. and under 5 cwt., 2s. 6d. per cwt. extra. Cut to sizes 4s cwt. extra.

Old lead, ex London area, at Mills .....per ton £11 0 0

PAINTS, &c.

	£	s.	d.
Raw Linseed Oil, in pipes .....per gallon	0	2	4
,, ,, ,, in barrels ..... ,,	0	2	6
,, ,, ,, in drums ..... ,,	0	2	9
Boiled ,, ,, in barrels ..... ,,	0	2	9
,, ,, ,, in drums ..... ,,	0	3	0
Turpentine, in barrels ..... ,,	0	4	6
,, in drums (10 galls.) ,,	0	4	8
Genuine Ground English White Lead, per ton	45	0	0
(In not less than 5-cwt. casks.)			
Extra for 1-cwt. kegs over 5-cwt. casks is 5/9 cwt.			

GENUINE WHITE LEAD PAINT.

"Father Thames," "Nine Elms," "Park," "Supremus," "St. Paul's," "Morganswyte," "Polacco," "J" Brand, and other best brands (in 14-lb. tins) not less than 5-cwt. lots per ton delivered £ 63 s. 0 d. 0

Red Lead, Dry (packages extra) ... per ton	34	0	0
Best Linseed Oil Putty .....per cwt.	0	13	6
Size. XD quality .....fkn.	0	3	0

VARNISHES, &c.

		Per gallon		
Oak Varnish	Outside	0	14	0
Fine ditto	ditto	0	16	0
Fine Copal	ditto	0	18	0
Pale Copal.....	ditto	1	0	0
Pale Opal Carriage	ditto	1	4	0
Best ditto	ditto	1	12	0
Floor Varnish	Inside	0	18	0
Fine Pale Paper	ditto	0	18	0
Fine Copal Cabinet	ditto	1	2	0
Fine Copal Flatting.....	ditto	1	0	0
Hard Drying Oak	ditto	0	18	6
Fine Hard Drying Oak	ditto	0	19	6
Fine Copal Varnish	ditto	1	0	0
Pale ditto	ditto	1	12	6
Best ditto	ditto	1	2	6
Best Japan Gold Size.....		0	12	0
Best Black Japan		0	10	0
Oak and Mahogany stain (water)		0	12	6
Brunswick Black		0	7	0
Berlin Black		0	14	0
Knotting (patent)		1	5	0
French and Brush Polish		0	17	0
Liquid Dryers in Terebene		0	9	0
Cuirass Black Enamel.....		0	7	0

GLASS.

ENGLISH SHEET GLASS IN CRATES OF STOCK SIZES.

per ft.		Per ft.	
15 oz. fourths	2⅝d.	32 oz. fourths	6½d.
15 ,, thirds ...	2⅝d.	32 ,, thirds	8½d.
21 ,, fourths	3½d.	Obscured Sheet, 15 oz....	3d.
21 ,, thirds ...	3⅝d.	,, ,, 21 oz....	4½d.
26 ,, fourths	4½d.	Fluted, 15 oz. 6½d., 21 oz.	9d.
26 ,, thirds ...	5½d.	Em'lld, 15 oz. 4½d., 21 oz.	5½d.

Extra price according to size and substance for squares cut from stock.

ENGLISH ROLLED plate in CRATES OF STOCK SIZES. Per ft.

Rolled plate ⅛ in.	4½d.
Rough rolled ⅛ in.	5½d.
Rough rolled ¼ in.....	5½d.
Figured, Rolled, Baltic, Oceanic, Arctic, Stippolyte, and small and large Flemish White	5½d.
Ditto, tinted	8d.
Rolled Sheet	4½d.
White Rolled Cathedral	4½d.
Tinted do.	6½d.

Cast plate is same price as rough rolled.

"VITA" GLASS. Per foot. s. d.

Clear sheet—not exceeding 1 foot	1	0
Do. do. 2 feet	1	3
Do. over 2 feet	1	9
Polished plate—not exceeding 1 foot	1	6
Do. not exceeding 2 feet	3	0
Cathedral—not exceeding 1 foot	1	0
Do. larger sizes	1	6
Horticultural Sheet and Cathedral "Vita" Glass. Sizes up to 24 inches by 18 inches or not exceeding 3 feet	1	0
3/16 in. Wired Georgian Design. Sizes up to 108 inches long by up to 24 inches wide.....	2	6

NEW BUILDINGS IN SCOTLAND

ABERDEEN.—REBUILDING.—The Scottish Amicable Building Society has purchased 250 and 252, Union-street. These houses will be demolished, and on the site will be erected a new building to be known as Amicable House. The architect is Mr. T. Scott Sutherland. The Halifax Building Society has also acquired 303-399, Union-street, and 1, Bon-Accord-terrace. A reconstruction scheme is to be carried out.

BATHGATE.—HOUSES.—The T.C. have decided to proceed with the erection of 76 houses.

CAMBUSBARRON. — RECONSTRUCTION. — Plans have been prepared for reconstruction and additions at 18 and 25 to 31, North End. Messrs. Greig & Bell, architects and surveyors, Granstonhill, Stirling.

DUNDEE.—BUILDINGS.—Plans and sections of the following proposed new buildings, etc., have been lodged at the office of the City Engineer:—Ann-street and Wellington-street—alterations for J. Rattray & Sons (architect, J. Johnston, 32, Bank-street); Baldovan-road—additions for Sir Herbert K. Ogilvy, Bart. (architect, N. T. Stewart, 119, Nethergate); Bridge-street, Barnhill—house for R. Samson (architect, T. Lindsay Gray, 2, India-buildings); Cowgate—office and store for T. Sturrock & Co. (architects, Thoms & Wilkie, 21, South Tay-street); Eton-street—villas for J. Carnegie & Son, Ltd. (architect, W. M. Patrick, 26, Yeaman-shore); Loraine-road and Rennell-road—houses for Gibson & Dargie (architect, J. Johnston); Meadowside and Murraygate—car park for Dundee Cinema Palace. Ltd. (architect, W. M. Patrick); Shaftesbury-road — garage for the Blackness Garage Co. (architects, Thoms & Wilkie, 21, South Tay-street).

DUNFERMLINE. — HOSPITAL. — The T.C. has approved a scheme for the erection of a new maternity hospital in Dunfermline. The suggested hospital is estimated to cost approximately £27,000.

FALKIRK. — SCHOOL. — The Stirlingshire C.C. have plans in hand for a £28,000 school at Merchiston. The plans are by Mr. A. N. Malcolm, Education Architect, Spittal-street, Falkirk.

GIRVAN.—HOUSING.—The T.C. have decided to go forward with the erection of their fourth development housing scheme, which will consist of five blocks at Park-road. The scheme, which has been sanctioned by the Department of Health for Scotland, will cost approximately £6,500.

GLASGOW.—BUILDING.—Tenders are being invited by the Corporation for the erection of the Central Police Mortuary at 184-194, Saltmarket.

GLASGOW.—BUILDING.—Plans are in hand for new church halls at Nitshill for the Church of Scotland. The plans are by Messrs. Speirs, Ltd., architects and surveyors, 13, Blytheswood-square, W.C.2.—Plans are also in hand for a reconstruction scheme at Pollockshaws for Messrs. J. J. Walker & Co. (Pollockshaws), Ltd., Shawbridge-street, Messrs. White & Galloway, architects, 121, Bath-street, Blytheswood.—Plans have been prepared for a reconstruction and additions scheme at Smythycroft-road by Messrs. John Keppie & Henderson, architects, 181, West Regent-street.

HADDINGTON. — SCHOOL. — The East Lothian C.C. has approved plans for additions to North Berwick High School and alterations to the existing building at an estimated cost of £14,000. Plans were also approved for the erection of a new secondary school in Haddington on a site in a field adjoining the Knox Institute playing field at an approximate cost of £21,100.

KIRKINTILLOCH.—HOUSING.—The T.C. are to proceed with 98 houses on the remaining unbuilt-on ground at Woodhead. A lay-out plan has been submitted to the Department of Health for their approval.

LENNOXTOWN.—ADDITIONS. — Plans are in hand for reconstruction and additions at Langfield Laundry. Mr. C. H. Armour, architect, Paisley-road, Glasgow.

MORAYSHIRE. — HOUSES. — The Housing Committee of Moray C.C. are to build new houses at Garmouth, Hopeman, and Rafford.

SALTCOATS.—HOUSING.—The T.C. are to proceed with 40 houses along the north side of the public park, subject to Government consent. Messrs. Hugh Thomson & Son are the architects.

SOUTHERN COUNTIES FEDERATION.

The autumn general meeting of the Southern Counties Federation of Building Trades Employers, which followed a meeting of the administrative committee, was held at the County Hotel, Canterbury, on Thursday, October 12, under the presidency of Mr. C. B. Sprigings, F.I.O.B.

The members of the Canterbury Association were the guests of the Federation at lunch prior to the meeting, and Mr. G. Browning, Canterbury, acknowledged the welcome extended to the Canterbury members by Mr. Sprigings.

Mr. W. J. Brooker, F.I.O.B., chairman of the Regional Joint Committee, reported at length on the proceedings at the recent meetings of the Regional Joint Committee in relation to its work in the direction of regularising regional gradings and rectifying anomalies. The members expressed their appreciation of the efforts which had been made by Mr. Brooker and his colleagues on their behalf, and approved the report. The meeting then proceeded to approve, subject to slight modifications, the revised regional rules submitted by the administrative committee. The meeting terminated with a vote of thanks to the President, and the members were then entertained to tea by the Canterbury Association, to whom the thanks of the members were expressed by the President.

BUILDING TRADE WAGES IN SCOTLAND*

Following are grade rates authorised by the Scottish N.J.C. for Building Industry. The bricklayers in the Glasgow district have ½d. per hour extra. Painters, by ruling of the Scottish National Painters' and Decorators' Joint Council, have from January 1 new rates. Grade A towns, 1/6 per hour; Grade B, 1/5; Grade C, 1/4; Aberdeen has a special rate of 1/5½. Every endeavour is made to ensure accuracy, but we cannot be responsible for errors that may occur.

Grade Classifications ...	A	A¹	A²	A³	B	B¹	B²	B³
Craftsmen	1/6	1/6	1/5½	1/5	1/4½	1/4	1/3½	1/3
Labourers	1/2	1/1½	1/1½	1/0½	1/0½	1/-	/11½	/11½

Aberdeen	A	Dundee	A	Hawick	A²	Perth	A
Airdrie	A	Dunfermline	A	Helensburgh	A	Perthshire	A
Alexandria	A	Dunoon	A	Inverness	B	Peterhead	A
Arbroath	A³	East Lothian	A	Kilmarnock	A	Renfrewshire	A
Ayrshire	A	Edinburgh	A	Kincardineshire	A²	Rothesay	A
Bathgate	A	Falkirk	A	Kinross-shire	A	Roxburghshire	A²
Bo'ness	A	Forfarshire	A³	Kirkcaldy	A	St. Andrews	A
Broughty Ferry	A	Fort William	A	Lanarkshire	A	Selkirkshire	A
Clackmannanshire	A	Galashiels	A³	Leith	A	Stirling	A
Coatbridge	A	Glasgow	A	Midlothian	A	Stirlingshire, West	A
Dumbartonshire	A	Greenock	A	Motherwell	A	West Lothian	A
Dumfries	A³	Hamilton	A	Peeblesshire	A²	Wishaw	A
Dumfriesshire	A³						

* The information given in this table is copyright. The rates of wages in various towns in England and Wales are given on page 631.

CURRENT PRICES FOR BUILDING WORK IN LONDON*

EXCAVATOR.

		s.	d.
Digging and throwing or wheeling and filling carts, and carting away to shoot—6 ft. deep	per yard cube	8	9
Add if in clay	„ „	1	0
Add for every additional depth of 6 ft.	„ „	0	6
Planking and strutting to trenches	per foot super	0	3
Do. to sides of excavation, including shoring	„ „	1	0

CONCRETOR.

Portland cement concrete in foundations 1 to 6	per yard cube	24	3
Add if in underpinning in short lengths	„ „	5	6
Add if in floors 6 in. thick	„ „	2	3
Add if in beams	„ „	2	9
Add if aggregate 1 : 2 : 4	„ „	9	0
Add for hoisting not exceeding 10 ft. beyond the first 10 ft.	„ „	2	0

BRICKLAYER.

		£	s.	d.
Reduced brickwork in lime mortar and Fletton bricks	per rod	27	0	0
Add if in stocks	„	7	0	0
Add if in Staffordshire blues	„	22	0	0
Add if in Portland cement and sand	„	1	5	0

FACINGS.

Extra for facing in English or Flemish bond for every 10s. per 1,000 over the price of the common bricks	per ft. super	0	0	1¼

POINTING

Neat flat struck or weathered joint	„ „	0	0	3

ARCHES.

Extra only to the price of ordinary brickwork :—				
Fair external in half brick rings	„ „	0	0	10
Axed in stocks	„ „	0	0	9
Rubbed and gauged jointed in putty camber or segmental	„ „	0	6	0

SUNDRIES.

Damp course in double course of slates breaking joint and bedded in Portland cement	„ „	0	0	11
Setting ordinary register grates and stoves	each	1	0	0
Setting kitchener, including forming flues, &c., with all necessary fire bricks	„	4	15	0

ASPHALTER.

		s.	d.
Half-inch horizontal damp course	per yard super	4	6
Three-quarter-inch vertical damp course	„ „	9	6
Three-quarter-inch on flats in two thicknesses	„ „	6	0
Angle fillet	per foot run	0	3
Skirting and fillet 6 in. high	„ „	1	0

MASON.

York stone templates fixed	per foot cube	12	9
York stone sills fixed	„ „	22	0
Bath stone and all labour fixed	„ „	10	6
Beer stone and all labour fixed	„ „	15	0
Portland stone fixed	„ „	17	6
Chilmark stone fixed complete	„ „	16	6

SLATER.

Welsh 16in. × 8 in. 3 in. lap. including nails	per square	72	9
Do. 20 in × 10 in. Do. Do.	„	80	9
Do. 24in. × 12in. Do. Do.	„	90	0

CARPENTER AND JOINER.

Fir framed in plates	per foot cube	4	0
Do. joists	„ „	4	6
Do. roofs, floors and partitions	„ „	5	0
Do. trusses	„ „	7	3

		¾″	1″	1¼″	2″
Deal rough close boarding	per sq.	30/-	35/-	43/-	70/-

Flat centering for concrete floor, including struts or hangers	„				50 0
Do. to beams	per ft. sup.				0 9
Centre for arches	„				1 6
Gutter boards and bearers	„				1 0

FLOORING.

		¾″	1″	1¼″	1½″
Deal-edges shot	per sq.	—	38/-	45/-	52/-
Do. tongued and grooved	„	—	43/-	50/-	58/-
Do. matchings	„	40/-	45/-	—	—
Moulded skirtings, including backings and grounds	per ft. sup.	1/4	1/7	1/9	2/3

SASHES AND FRAMES.

		s.	d.
One-and-a-half moulded sashes or casements	per foot super	1	10
Two Do. Do. Do.	„ „	2	1
Add for fitting and fixing	„ „	0	3
Deal cased frames with 1 in. inner and outer linings, 1½ in. pulley stiles tongued to linings, hard wood sills with 2in. moulded sashes in squares, double hung, double hung with pulleys, lines and weights, average size		3	6

DOORS.

		1½″	1¾″	2″
Two-panel square framed	per ft. sup.	2/1	2/3	2/5
Four-panel Do.	„	2/4	2/6	2/9
Two-panel moulded both sides	„	2/6	2/9	2/11
Four-panel Do. Do.	„	2/9	2/11	3/2

CARPENTER AND JOINER—continued.

FRAMES.

		s.	d.
Deal wrot moulded and rebated	per foot cube	12	6

		1″	1¼″	1½″
Plain deal jamb linings framed	per ft. sup.	1/7	1/8	1/11
Deal shelves and bearers	„	1/2	1/4	1/7
Add if cross-tongued	„	2d.	2d.	2d.

STAIRCASES.

	1″	1¼″	1½″	2′	2½″
Deal treads and risers in and including rough brackets	2/1	2/4	2/9	—	—
Deal strings wrot on both sides and framed	1/8	2/-	2/2	2/8	—

		s.	d.
Housings for steps and risers	each	0	11
Deal balusters, 1 in. x 1¼ in.	per ft. run	0	9
Mahogany handrail, average 3 in. x 3 in.	„ „	6	0
Add if ramped	„ „	12	0
Add if wreathed	„ „	24	0

FIXING ONLY IRONMONGERY (INCLUDING SCREWS).

6 in. barrel bolts	8½d.	Rim locks	2/-
Sash fasteners	11½d.	Mortice locks	4/3
Casement fasteners	1/5	Patent spring hinges and letting into floor and making good	19/-
Casement stays	1/2		
Cupboard locks	1/5		

FOUNDER AND SMITH.

		s.	d.
Rolled steel joists	per cwt.	15	0
Plain compound girders	„	18	0
Do. stanchions	„	20	9
In roofwork	„	26	6

RAIN-WATER GOODS.

		3″	4″	5″	6″
Half-round plain rebated joints	ft. run	1/-	1/1	1/3	1/6
Ogee Do. Do.	„	1/2	1/3	1/9	2/3
Rain-water pipes with ears	„	1/3	1/10	—	—
Extra for shoes and bends	each	2/9	3/11	—	—
Do. stopped ends	„	1/1	1/4	1/9	2/6
Do. nozzles for inlets	„	2/2	2/7	3/7	4/-

PLUMBER.

		s.	d.
Milled lead and laying in flashings and gutters	per cwt.	38	0
Do. do. flats	„	37	0
Extra labour and solder in coated cesspools	each	6	9
Welt joint	per ft. run	0	6
Soldered seam	„ „	1	3
Copper nailing	„ „	0	3

	½″	¾″	1″	1½″	2″	4″
Drawn lead waste perft. run	11½	1/4	1/6½	2/5	2/8	—
Do. service „	1/3	1/9	2/-	3/-	—	—
Do. soil „	—	—	—	—	—	5/9
Bends in lead pipe each	—	—	—	—	2/6	6/-
Soldered stop ends „	0/9	1/1	1/6	2/3	2/10	—
Red lead joints „	0/10	0/11	1/2	1/9	2/1	4/3
Wiped soldered joints „	2/3	2/9	3/0	3/10	4/10	6/9
Lead traps and cleaning screws „	—	—	—	10/6	14/-	—
Bib cocks and joints „	6/4	9/7	14/-	—	—	—
Stop cocks and joints „	12/4	14/2	20/8	54/-	—	—

PLASTERER.

		s.	d.
Render, float and set in lime and hair	per yard sup.	2	0
Do. Do. Sirapite	„ „	2	3
Do. Do. Keen's	„ „	3	0
Add saw lathing	„ „	1	4
Add metal lathing	„ „	2	4
(Not including hangers or runners, etc., for suspended ceilings.)			
Portland cement screed	„ „	2	2
Do. plain face	„ „	3	3
Mouldings in plaster	per 1 girth	0	1
One-and-a-half granolithic pavings	per yard sup.	5	3½

GLAZIER.

21-oz. sheet plain	per foot sup.	0	6¼
26-oz. Do.	„ „	0	7¾
Obscured sheet	„ „	0	8
⅛-in. rolled plate	„	0	9
¼-in. rough rolled or cast plate	„ „	0	10
¼-in. wired cast plate	„ „	1	1

PAINTER.

Preparing and distempering, 2 coats	per yard sup.	0	9
Knotting and priming	„ „	0	7
Plain painting, 1 coat	„ „	0	9
Do. 2 coats	„ „	1	2
Do. 3 coats	„ „	1	9
Do. 4 coats	„ „	2	4
Graining	„ „	2	3
Varnishing twice	„ „	1	9
Sizing	„ „	0	3
Flatting	„ „	0	7
Enamel	„ „	1	1
Wax polishing	per foot sup.	0	6
French polishing	„ „	1	2
Preparing for and hanging paper	per piece 2/- to 4/-		

*These prices apply to *new buildings only*. They cover superintendence by foreman and carry a profit of 10% on the prime cost without establishment charges. A percentage of 1½ should be added for Employers Liability and National Health and Unemployment Act, and from 1s. 6d. per £100 for Fire Insurance. The whole of the information given on this page is copyright.

TRADE NEWS

A Partition Contract.

Messrs. F. McNeill and Co., Ltd., of 52, Russell-square, London, W.C.1, have secured the contract for the supply of their "Insulcrete" unshrinkable partitions from Messrs. Holland & Hannen and Cubitts, Ltd., for their Oxford-street flats.

No. 61, St. James's-street, S.W.

With reference to this work, which we illustrated last week, Messrs. H. H. Martyn and Co., Ltd., were mentioned as having carried out the joinery to the first-floor elevation. We are informed that, in addition to this, they carried out the bronze shop front, cast-iron area railings, and stone carving to St. James's-street elevation.

Dismantling of a Glasgow Power Station.

The dismantling of the great electric power station at Port Dundas, which belongs to the City of Glasgow, has commenced. The station was established as long ago as 1899, but, with the materialisation of the electric grid system, the Port Dundas station has become superfluous. The actual building where the generators are situated is going to be converted into a Corporation 'bus garage. The whole of the plant and machinery has been purchased *in situ* by Messrs. George Cohen, Sons and Co., Ltd., the machinery merchants, at London, Leeds, Neath, Glasgow, etc., and the heavy and intricate task of dismantling this plant will provide work for a number of skilled and unskilled men.

Estate Development.

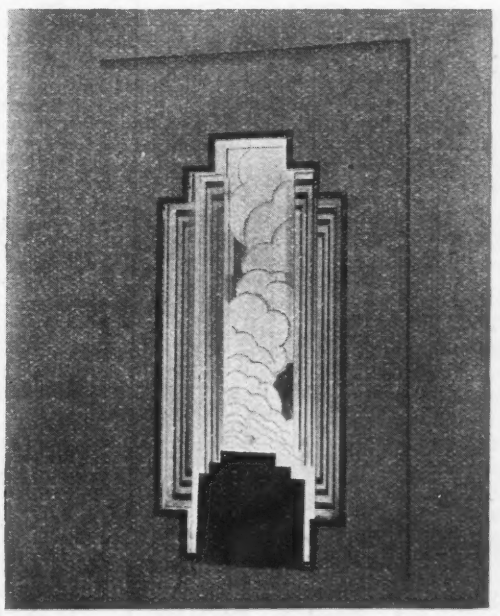
An interesting brochure on this subject has reached us from the British Portland Cement Association, Ltd., 20, Dartmouth-street, Westminster, S.W.1. "Roads Before Houses" is the theme of the booklet, and the case is presented for constructing permanent concrete roads to carry the building traffic and afterwards to be taken over as council roads, instead of laying temporary builders' roads to be remade at the expense of the frontagers when building is completed. The case is simple to make in view of the advantages offered—reduction of building costs occasioned by reduced handling of materials, saving of materials and simplified organisation, and, of equal importance, the powerful selling point of being able to offer houses for sale free of road charges. It has been found also, the brochure states, that on estates laid out with permanent concrete roads, the sale of houses is less seasonal since prospective buyers are able to inspect the property during the worst of the winter months without experiencing the disadvantage of being ankle-deep in mud. The booklet deals very fully with these points, and shows the economy of concrete roads on building estates. Other sections of the book deal with the installation of gas and electricity mains, water services, etc. Copies of this book, which is well illustrated, will be sent by the Association free to all who are interested.

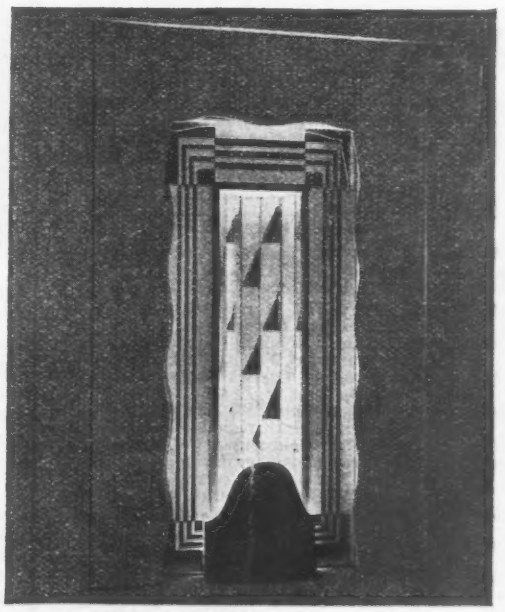
The Commercial Motor Show.

The most up-to-date information concerning important new models that figure in the 1934 programmes of manufacturers of commercial motor vehicles is published in the first show number of *The Commercial Motor*, on sale to-day (Friday). There is also a number of articles surveying aspects of development in different branches of the industry, and the advance news the issue contains stimulates interest in the forthcoming show. The second show number, to be published on October 27, will be a guide to exhibits in all sections of the show. It should prove invaluable, as it contains a forecast of the chassis and bodies and details of the leading accessories, components and garage equipment to be displayed—a veritable shop-window of the industry's products. Technical articles on topical subjects and statistical matter will also be given. A comprehensive and profusely illustrated report of the Commercial Vehicle Exhibition will appear in *The Commercial Motor* of November 3. This issue should form a valuable work of reference. Buyers and others will find the list of prices of all chassis on the British market a helpful compendium. Prominence will be given to a special guide intended to assist the busy man in his search of outstanding technicalities. Authoritative articles on a wide variety of important subjects will complete a striking number.

ARCHITECTURAL LIGHTING

CONSIDERABLE strides have recently been made in the field of architectural or built-in lighting for the home, and for theatres, cinemas, hotels, restaurants, dance halls, etc. Some effective examples of modern lighting fittings have been installed in a special section of the G.E.C. Illumination Showrooms at Magnet House, Kingsway, W.C., now open to the public. Generally speaking, while this form of lighting was familiar to most architects and decorative designers, its import could only be made clear to prospective users by means of drawings and verbal explanations of the system, which could only poorly convey the effects possible of attainment in architectural lighting. The G.E.C. have now made available various demonstrations of this method of illumination, in order that the manifold applications of the system may actually be inspected *in situ* by architects, consultants, decorative artists, electrical contractors, and prospective users interested in this modern method of illumination. Several striking applications, of which we illustrate two, are demonstrated of various types of architectural illumination, together with a wide range of lighting fixtures of suitable design to harmonise with this method of built-in illumination. These structural lighting settings consist of overflowing fountains, recessed windows with rainbow-hued curtains of light, the rays of morning sunrise or crimson sundown, and mirror lighting settings of refinement. They—and the decoration of the rooms housing them—were designed by Mr. Oliver Bernard, L.R.I.B.A. Architects will find a visit to these demonstration rooms at Magnet House stimulating in developing new methods of illuminating, not only for domestic work, but also for the decorative illumination of hotels, restaurants, theatres, cinemas and public places.





G.E.C. MIRROR-TYPE SETTINGS OF ARCHITECTURAL LIGHTING.

TENDERS

Communications for insertion under this heading should be addressed to "The Editor, and must reach him not later than Tuesday evning.

* Denotes *accepted.*
† Denotes *provisionally accepted.*
‡ Denotes *recommended for acceptance.*
§ Denotes *accepted subject to modifications.*
¶ Denotes *accepted by H.M. Government Departments.*

Aberdeen.—Houses and offices at St. John-terrace, Mannofield. Messrs. Tawse & Allan, architects and surveyors, 10, Bon Accord-square :—

Excavation, granite and brick—*J. Gauld, 29, Short Loanings.
Joinery, carpentry and ironmongery — *J. Mathieson, Great Western-road.
Slater—*E. Waldie, Union-row.
Plumber—*J. Dean, 32, Queen-street.
Plaster—*H. J. Baxter, Little Belmont-street.
Electrical fittings and installation — *J. B. Reid, Brownhill-road.

(All of Aberdeen.)

Ashby-de-la-Zouch.—Reinforced concrete culvert and diversion of the brook course at Packington, for the U.D.C. Messrs. Pick, Everard, Keay & Gimson, civil engineers, 6, Millstone-lane, Leicester :—

*T. Bugbird & Sons, Ltd., Leicester.

Bakewell.—Factory at Townshead Eyam, for Messrs. Willis & Co. Mr. J. W. Blackhurst, architect, Howard-chambers, 115, Norfolk-street, Sheffield :—

*Own Building Department.

Ballantrae.—New Mansion House and other offices. Mr. James Miller, architect, 15, Blytheswood, Glasgow :—

Excavation, mason and building — *T. McWhirter, Hebron Works, Prestwick.
Joinery, carpentry and ironmongery — *J. Grant & Co., Holland-street, Blytheswood, Glasgow.
Plumber—*W. Anderson, Ltd., 133, Wellington-street, Blytheswood, Glasgow.

Belfast.—New public elementary school at Finaghy, for the Lisburn and Belfast E.C. Messrs. Ferguson & M'Ilveen, architects, Belfast :—

H. & J. Martin, Ltd., Belfast £6,627

Birmingham.—Reconstruction of the bridge carrying Thimble Hill-lane over the Birmingham and Fazeley Canal at Aston, for the T.C. Mr. H. H. Humphries, City Engineer :—

*A. Humphries, Birmingham.

Birmingham.—Public library on the corner of Hawthorn-road and College-road, Perry Common, for the T.C. Messrs. J. P. Osborne & Son, architects, 95, Colmore-row :—

*P. Cox, Ltd., Birmingham.

(Estimated cost: £14,305.)

Birmingham.—Two shops at the corner of Blossomfield-road, Solihull. Messrs. F. B. Clark & Co., architects, 14, Temple-street :—

*H. Hankins, Birmingham.

Birmingham.—6 shops with garage at the corner of Cranmore-road and Marshall Hall-lane, Cranmoor estate, Shirley. Messrs. Jones & Croxford, architects, 29, Waterloo-street :—

*Stubbs Bros., Birmingham.

Birmingham.—Erection of "Helicon" hollow tile fire-resisting floors and roofs, concrete balconies and balustrading and encasure to steel beams in connection with the new central fire station, for the T.C. :—

*Helical Bar & Engineering Co., Ltd., 82, Victoria-street, London, S.W.1.

Blantyre.—Houses at Hunt Hill-road (2nd development), for the Lanarkshire C.C. Mr. P. Smith, County Architect, Clydesdale-street Offices, Hamilton :—

Excavation, brick and mason—*A. Wright & Sons, Blantyre.
Joinery, glazing, carpentry and ironmongery—*Wallace & Young, Hamilton.
Slater and harling—*J. Scott, 62, Queen-street, Rutherglen.
Plumber—*S. Lauder, The Sanitary Works, Uddingston.
Plaster and cement—*C. Messer, High Blantyre.
Painter—*P. Hastie & Sons, 2, Tallis-street, Bridgeton Cross, Glasgow.
Electric fittings and installation—*J. Edwards, 260, Great Western-road, St. George's Cross, Glasgow.

Blyth.—New infants' school in Princess Louise-road, for T.C. :—

*G. Towers, Blyth ..... about £9,055

Bradfield.—Two houses in School-lane, for the District Council :—

*F. J. Reynolds, Thatcham £644

Bradford.—Parochial hall, for the Vicar and Parochial Council of St. James' Church, Nelson-street, Manchester-road. Mr. E. Bray, architect, 113, Town-street, Stanningley, Leeds :—

*Wood Bros., Ltd., Pudsey, Yorks.

Bradford.—Sub-station in Giles-street, Wibsey, for the T.C. :—

*L. & W. Morrell, Bradford.

Cadder.—New houses at the Caryston housing site, for the Lanarkshire C.C. Mr. Peter Smith, County Housing Architect, Clydesdale-street Offics, Hamilton :—

Excavation, brick and mason—*W. Chambers & Son, Ltd., Flemington Goods Station, Motherwell.
Joinery, carpentry and ironmongery—*McBean McQueen, Bellshill.
Slater—*M. Thom & Co., Ltd., Bank-street, Airdrie.
Plaster—*W. Walker & Sons (Glasgow), Ltd., 1, Salisbury-place, Glasgow.
Painting — *Flemings, Ltd., Tollcross Drysalteries, Glasgow.
Plumber—*Duncan Johnstone, Waterside Sanitary Engineering Works, Strathavon.
Electric fittings and installation—*G. F. McKay & Sons, Electric Engineering Works, Glasgow.

Caernarvon.—36 houses at Cae Stoddard, for the T.C. :—

*G. & J. P. Gregory ..... £320 each

Cannock.—52 houses on the Pye Green site, for the U.D.C. :—

*Direct Labour.

Carlisle.—Alterations and extensions to the administration block and erection of a training school for nurses, for the Board of Management of the Cumberland Infirmary. Mr. S. W. B. Jack, architect, Lloyds Bank-chambers, Lowther-street :—

Builders—*J. Laing & Son, Ltd.
Joiners—*T. Lawson & Son.
Plumbers—*Graham & Crawford.
Plasterers—*J. & R. Bell, Ltd.
Painters—*W. Reid & Son, Dumfries.
Slater—*G. Irving.

(Remainder of Carlisle.)
(Estimated cost £12,000.)

Carmunock.—Suite of shops and other accommodation. Mr. J. Taylor, architect and surveyor, 220, West Regent-street, Glasgow :—

*Hunter & Clark, 1179, Gallowgate-street. Parkhead Cross, Glasgow, E.C.

Carrick-on-Suir.—26 houses in massed concrete, for the U.D.C. :—

—. Coston, Waterford.

Chesterfield.—For (*a*) additions to Derby-road Infants' school and (*b*) additions to the "Peter Webster" school, Whittington Moor, for the E.C. Messrs. Wilcockson & Cutts, architects, Saltersgate :—

(*a*) *W. Marriott £5,500
(*b*) *G. Berresford 1,228
(Both of Chesterfield.)

Cupar.—Reconstruction and extension at Cupar Springfield Asylum. Mr. A. D. Haxton, architect and surveyor, Commercial-road, Leven :—

Excavation, brick and mason—*D. Nairn & Sons, Cairn Green, Cupar.
Plumber—*W. Nicol & Sons, Ltd., Randolph Sanitary Engineering Works, Buckhaven.
Steel construction—*J. Carrick & Sons, Hillside Foundry, Cupar.
Slater work and harling—*W. Currie & Sons, 148, Dunnikeir-road, Kirkcaldy.
Patent glazing—*A. Goldstein & Co., London.
Heating engineering and gasfitting — *McKenzie and Moncur, Balcarres Heating Engineering Works, Edinburgh.
Joinery, carpentry and ironmongery—*H. & J. Philip, Five Cabinet Works, Dunfermline.
Plaster and cement—*D. T. Smith, Waggon-road, Leven.
Tile and allied works—*Clumus & Co., Edinburgh.
Electrical fittings and installation—*Andrew Hoggart, Edinburgh.

Clydebank.—Tea rooms, etc., for City Bakeries, Ltd., of Glasgow. Mr. John Biggar, architect, 180, West George-street, Glasgow, W.C.2 :—

Demolition, brick and mason—*J. Gilchrist & Sons, Ltd., New-street, Bain-square, Calton, Glasgow.
Joinery, carpentry and ironmongery—*Lawson & Co. (Govan), Ltd., Park Saw Mills, Allison-street, Glasgow.
Plumber—*A. Anderson & Co., 3, Abbot-street, Shawlands Cross, Glasgow.
Plaster—*J. McIntyre, Peebles-street, Eglinton-road, Glasgow.
Marble and tile—*J. Duncan, 108, West Campbell-street, Blytheswood, Glasgow.

Darlaston.—For (*a*) 50 houses on the Park-street site, and (*b*) 36 houses in Willenhall-street North, for the U.D.C. :—

(*a*) *Hammond Bros. £13,674
(*b*) *L. Griffiths 10,086

¶Devonport.—New rangefinder test house, for Civil Engineer-in-Chief's Department, Admiralty :—

*A. N. Coles (Contractors), Ltd., Queen Anne's Battery, Plymouth.

Douglas (I. of Man).—150 houses at Pulrose, Braddan, for the T.C. Mr. J. E. Teare, 46, Athol-street :—

‡Universal Housing Co., Ltd., Peel-road, Douglas, I.O.M. £59,713

Ealing.—Additions to 40 and 41, High-street, for Messrs. Lilley & Skinner :—

*H. Kerswell, 38a, High-street, W.5.

Ealing.—For store in St. Margaret's-road, for Messrs. Rapidol, Ltd :—

*G. Holland & Sons, Broomfield Works, W.13.

Ealing.—House in Watlow-road, for Messrs. H. J. Heinz & Co., Ltd. :—

*E. H. Burgess, Ltd., 20, Grosvenor-gardens, S.W.1 :—

Edinburgh.—Houses, shops and other offices in Craiglochest-avenue. Robbs-lane, Mountcastle-drive and crescent, Craighleith Hill :—

*J. Miller, 88, Hanover-street, Edinburgh.

Edinburgh.—17 houses, shops and other offices in Britwell-road and Caizen-terrace. Mr. Petter R. McLaren, architect and surveyor, St. Andrew's-square :—

*G. Orr, Wakefield-avenue, Edinburgh.

Edinburgh.—40 houses in Craigmount-gardens :—

*Hepburn Bros., Craiglochest-road, Edinburgh.

FLATS

THE RIGHT MARBLE

THE RIGHT PLACE

AT LESSER COST

JOHN STUBBS & SONS

Ellesmere Port.—New wharf and lay-by at the Mersey Paper Mills, for Messrs. W. V. Bowater & Sons, Ltd., 121, Victoria-street, E.C.4. Plans prepared by own staff :—

*Sir Robert McAlpine & Sons, Ltd., London, S.W.1.
(Estimated cost £850,000.)

Glasgow.—Bronze metal fronts at Shettlestone, for the Scottish Co-operative Wholesale Society, Ltd. :—

*Cheltenham Shopfitting Co., Ltd., Cheltenham.

Glasgow.—Reconstruction on the Corn Exchange Restaurant in Gordon-street. Messrs. Gall & Barr, architects and surveyors, 59, Bath-street, W.C.2 :—

*A. Hamilton, Ltd., Glassford-street, Glasgow.

Glasgow.—Reconstruction and additions at Mary Hill-road. Mr. John Biggar, architect, 180, West George-street :—

Demolition, brick and mason—*J. Gilchrist & Sons, Ltd., New-street, Bain-square, Calton, Glasgow.
Plaster—*W. Tonnar & Son, 158, North-street, Charing Cross, Glasgow.
Plumber—*G. Munro & Co., Ltd., 213, West Campbell-street, Glasgow, W.C.
Joinery, carpentry and ironmongery—*Lawson & Co. (Govan), Ltd., Park Saw Mills, Allison-street, Glasgow.

Gloucester.—Alterations to premises in Eastgate-street :—

*Cheltenham Shopfitting Co., Ltd., Cheltenham.

Godstone.—12 houses at South Godstone, for the R.D.C. :—

‡E. S. Moss, Ltd., Cricklewood, N.W.2 £4,142

Goole.—Premises in Eastcourt-terrace, for Messrs. Easthams, Ltd., Market-square. Mr. F. Turner, architect, Carlisle-street :—

*Platt & Featherstone, Goole.

Hucknall.—28 bungalows for aged persons on the Palmer-avenue estate, for the U.D.C. Mr. H. M. Aitchison, surveyor :—

*Walters & Westley, Woodseats, Sheffield £5,304

Huddersfield.—Block of business premises at the junction of King-street and Venn-street, for Messrs. Batley & Wood. Messrs. Joseph Berry & Sons, architects :—

*E. Batley.

Hull.—16 shops in Southcoates-lane. Messrs. Alldridge & Clark, architects, Brian-chambers, 101, Alfred Gelder-street :—

*J. Bilton, Wincolmlee, Hull.

Hull.—Erection of Beverley sub-station, for the T.C. :—

*G. Anson £465

Hull.—304 non-parlour type houses on the Endike-lane estate, for the T.C. :—

Simms, Sons & Cooke, Ltd., Nottingham £90,246
*G. & C. Whittle, Ltd., Arnold 87,378

Hull.—Villa for 40 patients, including road drainage, etc., at Mental Hospital, Willerby, for the T.C. Mr. D. Harvey, A.R.I.B.A., City Architect :—

*R. S. Tarran, Hull £5,995 9

Huntly.—Extensions and reconstruction at the Jubilee Hospital. Messrs. G. Brunet Mitchell, architects, West Craibston-street, Aberdeen—

Excavation, brick and mason—*G. Duncan & Son, St. James'-place, Inverarie.
Joinery, carpentry and ironmongery — *J. McKay & Son, King-street, Huntly.
Plumber—*H. M. Gray, 507, Bogie-street, Huntly.
Heating engineering—*MacKenzie & Moncar, Balcarres-street, Edinburgh.
Plaster and cement—*G. McKay, 19, Bluchfield-street, Huntly (for nurses' accommodation). *A. Munro, 5, Bogie-street, Huntly (for new wards).
Electrical fittings and installation—*Aberdeen Electrical Engineering Co., Ltd., 17, Belmont-street, Aberdeen.
Slater—*J. Cown & Sons, Huntly.
Painting and glazing—*Evans & Fraser, Nelson Glazing Works, Nelson-street, Huntly.

Ilkeston.—Alterations to "Sir John Warren" hotel in Market-place, for Messrs. Hardy's Kimberley Brewery, Ltd., Kimberley, near Nottingham. Messrs. Taylor, Son & Mundy, architects, 23, King-street, Nottingham :—

*F. Sisson & Sons, Langley Mill, Notts.

Keighley.—Model dairy in Adelaide-street, for the Keighley Industrial Co-operative Society, Ltd., 5, Prescot-street. Plans by Architects' Department, Co-operative Wholesale Society, Ltd., Balloon-street, Manchester :—

*H. V. Robinson, Ltd., Keighley.

Kendal.—Extensions to head office in Stramongate, for the Provincial Insurance Co., Ltd. Messrs. Bradshaw Gass & Hope, FF.R.I.B.A., architects, 19, Silverwell-street, Bolton :—

*P. A. Baines & Son (Northern), Ltd., Kendal.

Lancaster.—Christian Science Sunday school in Queen's-street, for the Trustees. Mr. S. G. Oldham, architect, 2, Lancashire-street, Morecambe:—
*Thompson & Jackson, Lancaster.

Leeds.—New boiler house at the Holbeck-lane tailoring factory, for Messrs. J. May & Co., Ltd., Messrs. Brierley, Rutherford & Syme, architects, Lendal, York:—
*Armitage & Hodgson, Ltd.

Leeds.—Additions to 32, Park-square, for Mr. D. Hey. Messrs. Kitson, Parish, Ledgard & Pyman, architects, Lloyds Bank-chambers, Vicar-lane:—
*W. Irwin & Co., Ltd.

Liverpool.—Extensions at the Waterloo and District General Hospital, 53, Kimberley-drive, Great Crosby. Mr. E. B. Bailey, L.R.I.B.A., architect, 34, Castle-street:—
*Brown & Backhouse, Liverpool.
(Estimated cost £5,000.)

¶**London.**—Tenders accepted by H.M. Air Ministry for the week ended October 7. Lee-on-Solent, dining-room, and Gosport, M.T. vehicle shed:—
*John Hunt, Ltd., South Wharf, Cleveland-road, Gosport.

¶**London.**—The following works contracts have been placed by the War Office during the week ended October 12:—
Catterick—periodical services—J. R. Surtees, Benfieldside, Co. Durham; accommodation for a brigade—Geo. Dougill & Sons, Darlington; repairs to floors—J. R. Surtees, Benfieldside, Co. Durham, and Geo. Dougal & Sons, Darlington.
Chilwell—repairs to roofs—W. Crane, Ltd., Nottingham.
Melton Mowbray—overseer's quarters—F. Perks & Son, Ltd., Long Eaton.
Newcastle-on-Tyne—roads and parades—Constable, Hart & Co., London, S.W.

¶**London.**—Tenders accepted by H.M.O.W. for the week ended October 12:—
Bradford Head Post Office—supply of revolving doors and drums—Samuel Elliott & Sons (Reading), Ltd., Caversham, Reading.
Shrewsbury Station Sorting Office—erection of garage E. Crowder, South Road, Handsworth, Birmingham.
Atherton Telephone Exchange — erection — James Greenwood, Ltd., Huntley Brook, Bury.
Bracknell Post Office and Telephone Exchange—erection—A. Roberts & Co., Ltd., 74, Earl's Court-road, Kensington, W.8.
Preston Employment Exchange—erection—J. Turner, Bamber's Yard, Preston.

London.—Repairs and decorations at 158, Hurlingham-road, for the Fulham B.C.:—

A. J. Houghton	£168 0
Swan Bros.	174 10
W. J. Marston & Son	127 10
Savage & Co.	117 0
W. Brooks & Son	116 0
*G. Roberts, 16, Peterborough-road, S.W.6	115 11

(All of London.)

London.—Shop front to Nos. 29 and 31, Ebury Bridge-road, for the Westminster City Council:—

Fredk. Sage & Co., Ltd.	£218 0
E. Pollard & Co., Ltd.	203 15
Davies & Co. (Shopfitters), Ltd.	181 0
*Cooke's (Finsbury), Ltd.	159 1

London.—Providing and fixing iron railings to the forecourt gardens of the houses in Nimrod-road, and to enclose the grass bank in Beclands-road, on the Furzedown housing estate, for the Wandsworth B.C.:—
*T. W. Palmer & Co. £159 10

Ludlow.—Extensions to the junior school, for the Salop C.C. Mr. A. G. Chant, A.R.I.B.A., County Architect, Shrewsbury:—
*A. H. Woodhouse, Shrewsbury.
Reinforced concrete foundations and the floors—*Trussed Concrete Steel Co., Ltd., S.W.7.

Macclesfield.—Electricity showrooms at Poynton, for the Electric Co. of Macclesfield, Ltd., Mill-street:—
*J. Clayton & Sons, Ltd., Macclesfield.

Malvern.—New shopfront premises in Church-street:—
*Cheltenham Shopfitting Co., Ltd., Cheltenham.

Manchester.—Additions to works in Richmond-grove, for Messrs. J. B. Rogers, Ltd., Richmond-grove:—
*P. Hodkinson, Ltd., Manchester.

Meath.—Cottages, for the Meath Board of Health:—
Dunshaughlin—
Three—*M. Murray, £230 each.
Two—*C. Geraghey, £247 10s. each.
Three—*H. M'Nally, £248, £246 and £245.
Two—*T. Hobbs, £240 and £235.
One—*P. M'Cabe, £250.
One—*M. O'Toole, £249.
Oldcastle—
One—*P. Reilly, Tubrid, £250.

Mexborough.—40 houses, for Mr. J. S. Greensmith:—
*P. Whitehead, Mansfield £19,587

Middlesbrough.—Nurses' home and rebuilding of disinfector house at the West-lane hospital, for the T.C. Mr. S. E. Burgess, Borough Engineer:—
*J. Andrews (Construction), Ltd., Redcar £5,857

Millfoot.—Petrol station, etc. Mr. J. Taylor, architect and surveyor, 220, West Regent-street, Glasgow:—
*Hunter & Clark, 1179, Gallowgate-street, Parkhead Cross, Glasgow.

Newcastle-on-Tyne.—Shopfront in marble and stainless steel, and neon sign at Barras Bridge:—
*James White & Co., 107, Pilgrim-street, Newcastle-on-Tyne, 1.

Newcastle-on-Tyne.—Converting the premises of the Association Rubber Manufacturing Co., Grey-street, into a block of shops and offices. Messrs. Marshall & Tweedy, architects, Mervyn House, Pilgrim-street:—
*J. R. Rutherford, The Minories, Jesmond, Newcastle.

Newcastle-on-Tyne.—Alterations to premises in the Bigg Market, for Messrs. Bainbridge, Ltd. Messrs. J. W. Taylor & Son, architects, St. John-street:—
*F. J. Hepple, Dunn-street, Newcastle.

Newport (Mon).—New premises, for the "South Wales Argus." Mr. C. E. Tebbs, A.R.I.B.A., architect, High-street:—
*A. Lovelock, Corelli-street, Newport.
Truscon floors and reinforced concrete retaining walls—*Trussed Concrete Steel Co., Ltd., S.W.7.

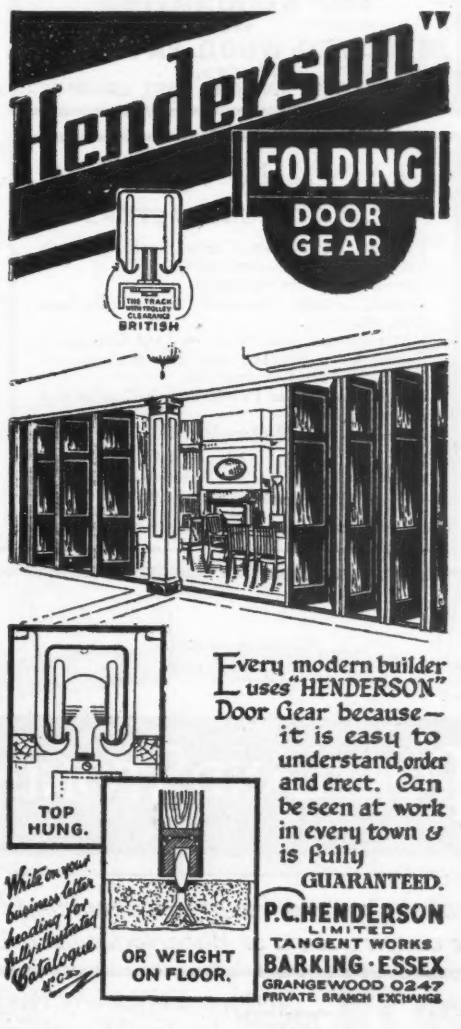
North Watford.—New dairy premises at 460, St. Albans-road, for the Express Dairy Co., Ltd., 26-30, Tavistock-place, W.C.1. Mr. Eric N. Smallwood, architect to the company:—

G. H. Kempstor, Ltd., Watford...	£3,711 17 4
C. & F. Bryen, N.8	3,482 0 0
J. C. Rackham, Harrow Weald	3,426 0 0
Fassnidge & Son, Ltd., Uxbridge	3,157 0 0
Commercial Structures, Ltd., N.1	2,968 0 0
W. F. Bridges, Sutton	2,949 10 0
J. McKenzie, N.W.4	2,940 0 0
C. A. Wiseman, Osterley Park ...	2,930 0 0

Nottingham.—Model dairy at West Dale-lane, Gedling, for the Netherfield Co-operative Society, Ltd., Victoria-road, Netherfield. Mr. C. F. Moxon, architect, 3, Regent-street, South Barnsley:—
*Hopper & Green, Nottingham.

Portsmouth.—Mild steel and cast-iron fencing at North End recreation ground, for the T.C. City Engineer:—

	Per yd. lin.
*Dobbing & Co., South Dock Ironworks, Extension-road, Sunderland	20s. 6d.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Portsmouth.—Alterations to Albert-road school, for the T.C.:—
*E. & A. Sprigings £365

Preston.—Convent chapel at the Convent of the Holy Child, Hinckley-square, for the Society of the Jesuits. Mr. C. Mangan, architect, 18, Guild-hall-street:—
*Levi Yates, Preston.

Reigate.—Block of four shops with living accommodation and showrooms above, for the Purley Investment Trust, Ltd. Messrs. Paxton Watson & Son, F./A.R.I.B.A., A.R.C.A., architects:—
*T. Couzens & Sons, Ltd., West Marden, near Chichester.

Romford.—10 houses in Sunnings-lane, Upminster, for the R.D.C.:—
*Universal Housing Co., Rickmansworth £2,900

Rotherham.—Premises, shops and showrooms in Corporation-street, for Messrs. E. J. Brown & Co. Mr. E. J. Knight, architect, Moorgate:—
*Coe & Lorriman, Rotherham.

Rotherham.—Hotel in Fitzwilliam-road, for Messrs. Tennant Bros., Exchange Brewery, Sheffield. Mr. W. Dixon, architect, St. James-row, Sheffield:—
*W. M. Beeden, Ltd., Thrybergh, near Rotherham.

Rushden.—Additional office accommodation at the Council-chambers, for the U.D.C. Mr. J. W. Lloyd, surveyor:—
*W. Packwood & Sons, Rushden £667

Ruthin.—28 houses, for the R.D.C.:—
*T. Rogers & Son, Brymbo, near Wrexham
*John Davies, Bodfari.
*R. D. Hughes, Ruthin.
(Total £8,262.)

St. Monance.—50 houses at St. Monance, for the T. C. Mr. C. F. Anderson, 147, Market-street, St. Andrews:—
Builder—*R. Ferras, jnr., East Wemyss.
Joiner—*W. Lumsden, Pittenweem.
Plumber—*T. Stewart, Methil.
Slaters—*D. & T. Peebles, Leven.
Plasterers—*D. & T. Peebles, Leven.
Painters—*D. Walker & Son, Anstruther
Fencing—*A. Mowat, Windygates.

Salford.—Grain silo, for Messrs. R. & W. Paul, Ltd., of Ipswich. Messrs. J. Clarke & Son, architects, 3, Rumford-place, Liverpool:—
*D. Walton & Co., Salford.
(Estimated cost: £9,000.)

Scarborough.—Painting of 277 houses, for the T.C.:—
*Watt Smith, Scarborough £484

Shildon.—New R.C. Church. Mr. R. Burke, architect, 12, Grey-street, Newcastle:—
*E. Thompson, Dinnington Village, near Newcastle-on-Tyne.

South Shields.—Extensions and alterations to the British Legion headquarters, Winchester-street. Messrs. J. H. Morton & Son, architects, Martin's Bank-chambers, South Shields:—
*Henderson Bros., Smith-street, Tyne Dock.

Southam.—Eight houses, for the R.D.C. Messrs. Quick & Lee, architects, 11, Waterloo-place:—
*H. Wells Laurence, Leamington £2,803

Southport.—Five workmen's houses, adjoining Boundell House pumping station, Halsall, for the Southport and District Water Board. Mr. C. Burton Ede, M.I.C.E., engineer and manager, 14, Portland-street:—
*T. Higson & Sons, Blackburn.

Spondon.—New Methodist Church, for the Building Committee of the King-street and Traffic-street Methodist circuits:—
*Gee, Walker & Slater, Derby £6,436

Stanley (Co. Durham).—Extensions to the Northern General Transport Co.'s garage. Mr. A. H. Fennell, L.R.I.B.A., architect, Chester-le-Street:—
Contractor—*Gordon Durham & Co., East Boldon.
Reinforced concrete—*Trussed Concrete Steel Co., Ltd., S.W.7.

Stapleford.—44 houses in Albert-avenue and Rye-croft-street, for the R.D.C. Mr. G. C. Hardy, architect, 11, Church-street:—
*F. Martin, Stapleford.

Stubbington.—Alterations and additions to "The Haven," Hillhead, for Col. J. S. Alston. Mr. H. Sherwood, L.R.I.B.A., architect, East Ashling, near Chichester:—
*T. Couzens & Sons, Ltd., West Marden, near Chichester.

Stonehaven.—Mansion and other offices. Mr. E. Williamson, architect and surveyor, 154, Union-street, Aberdeen:—
Excavation, brick and mason—*A. Adamson, Linnear-square, Laurencekirk.
Plumber—*A. McRobb & Co., Ltd., Adelphi Enginering Works, Union-street, Aberdeen.
Joinery, carpentry and ironmongery — *R. Thomson & Son, 19, Bridge Fields, Stonehaven.
Slater—*R. Burnett, 17, Mary-street, Stonehaven.
Electrical fittings, etc.—*A. McRobb, Ltd., Adelphi Engineering Works, Union-street, Aberdeen.

Sunderland.—New vestry at St. Mark's Church, Millfield. Messrs. W. & T. R. Milburn, architects, 17, Fawcett-street:—

*J. Huntley & Sons, Marion-street, Sunderland £1,500

Sunderland.—New Methodist Church in High-street East. Messrs. W. & T. R. Milburn architects, 17, Fawcett-street:—

*R. Hudson & Sons, St. Mark's-crescent, Sunderland £3,000

Swinton and Pendlebury.—For (1) 98 houses on Clively Bank estate, and (2) 111 houses on Windmill estate, for the U.D.C. Mr. H. Entwistle, surveyor:—

*Direct Labour Department (1) £29,888 and (2) £34,419.

Tideswell.—For (*a*) Co-operative stores at Eyam, for the Tideswell Co-operative Society, and (*b*) a bungalow, for Mr. H. S. Dawes. Mr. J. W. Blackhurst, architect, Howard-chambers, 155, Norfolk-street, Sheffield:—

(*a*) & (*b*) *Evans Bros., Bradwell, near Sheffield.

Uxbridge.—74 houses and roads and sewers on the Avenue housing estate, Green-lane, Hillingdon, for the U.D.C. Mr. W. L. Eves, F.R.I.B.A., architect, 54, High-street:—

*G. H. Gibson & Sons, High Wycombe £24,367 13

Wallasey.—Extensions to the cattle food warehouse at Wallasey Mills, for Messrs. Spiller's, Ltd., Central Wheat Dept., Cunnard-buildings, Liverpool. Messrs. J. Clarke & Son, architects, 3, Rumford-place, Liverpool:—

Builders—*J. A. Milestone & Son, Ltd., Wallasey.
Steelwork—*Redpath Brown & Co., Ltd., Liverpool.
Decorators—*Woolfall & Rimmer, Southport.

Wallsend-on-Tyne.—Conversion of premises at the corner of Park-road and High-street East into a restaurant and café. Mr. W. Riddle, architect, 53, Denham-terrace:—

*Clark Bros., Wallsend.

Walsall.—For (*a*) 24 three-bedroom type non-parlour houses on the Bentley Edward-street site; (*b*) 63 non-parlour houses and 4 shops on the James-street clearance site; and (*c*) 11 one-bedroom bungalows for aged persons on the Caledon Pleck site, for the T.C. Mr. J. Taylor, Borough Surveyor:—

(*a*) and (*b*)—†L. G. Pearce (*a*) £6,480 (*b*) £18,955
(*c*) †B. Denning 1,958

(Both of Walsall.)

West Dean.—26 houses for the R.D.C. Mr. A. S. Johnson, architect, Council Offices, Coleford:—

4 at Berry Hill—		
J. G. Rowland, Cinderford	£1,463	0
Universal Housing Co., Rickmansworth, Herts—	1,287	8
H. J. Walker, & Son, Coleford	1,267	0
*A. James, Berry Hill, Coleford	1,162	0
4 at Parkend—		
J. G. Rowland, Cinderford, Glos	1,492	0
J. H. Davies, Blakeney, Glos	1,410	0
Universal Housing Co., Rickmansworth	1,287	8
H. J. Walker & Son, Coleford	1,213	0
F. N. Wright, Lydney	1,202	13
*A. James, Berry Hill, Coleford	1,180	0
10 at Bream—		
H. J. Walker & Son, Coleford	3,250	0
Universal Housing Co., Rickmansworth	3,218	10
F. N. Wright, Lydney	3,054	6
*A. Redding, Lydney	2,925	0
8 at Yorkley—		
J. H. Davies, Blakeney, Glos.	2,820	0
H. J. Walker, Bream	2,616	0
Universal Housing Co., Rickmansworth	2,574	14
F. N. Wright, Lydney	2,485	0
*A. Redding, Lydney	2,340	0

Worcester Park.—Roads and sewers in Edenfield-gardens, The Avenue estate. Messrs. Atkinson & Marler, surveyors, Ewell. Mr. E. Russell, P.A.S.I., quantity surveyor:—

Ellingham & Co.	£21,081
Fitzpatrick	20,503
Tarmac	20,032
Gaze	19,899
Willment Bros.	19,591
Bridgwater Bros.	18,390
Cronk & Sons	18,373
*Geo. Wimpey,, & Co.	17,980

Worsborough.—For (*a*) 10 bungalows at Birdwell, and (*b*) 20 bungalows at Yews-lane, for the U.D.C. Mr. T. Shield, engineer and surveyor:—

(*a*)—*H. Burton, Barnsley £2,080
(*b*)—*R. B. Porter, Barnsley 4,250

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